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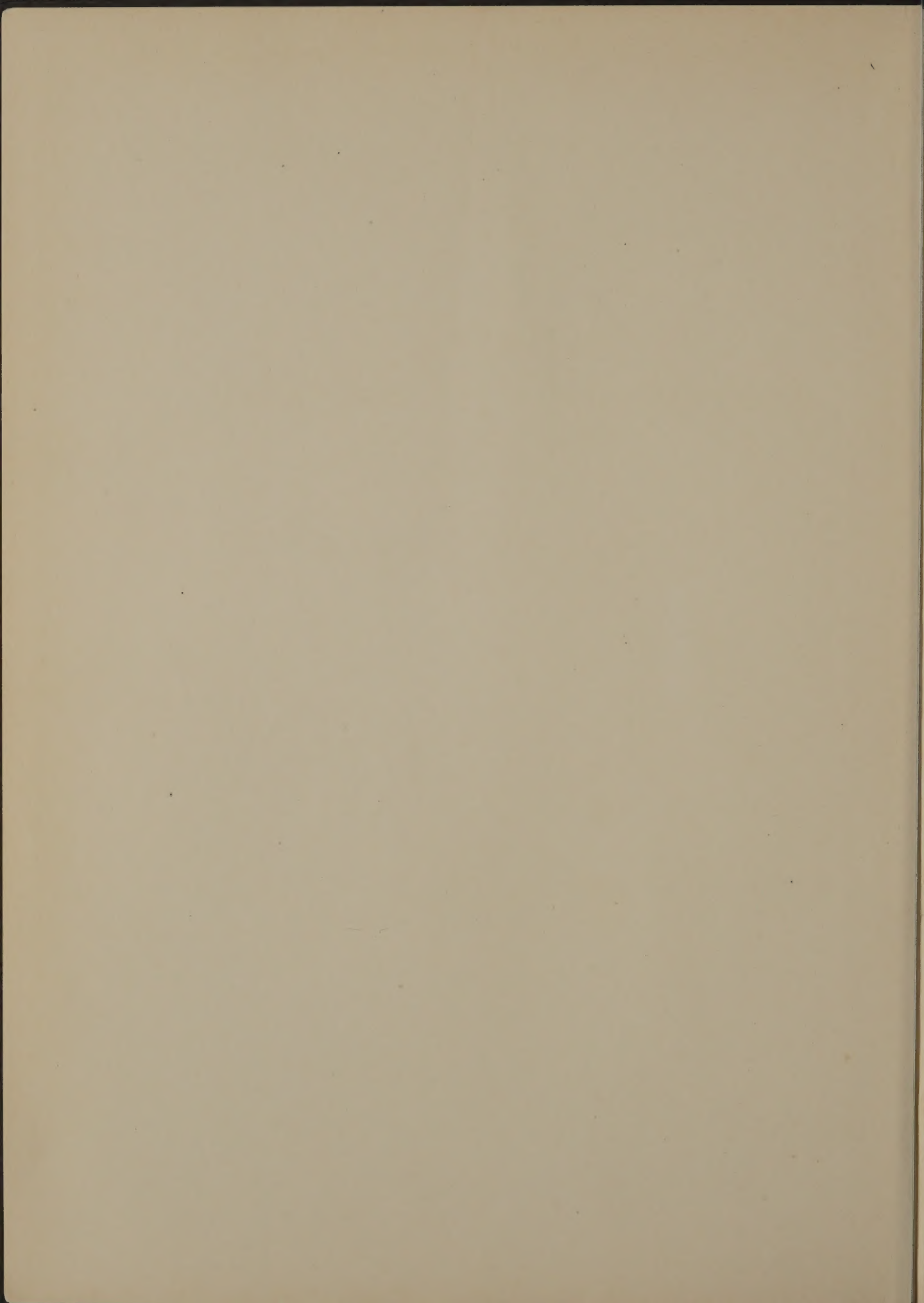
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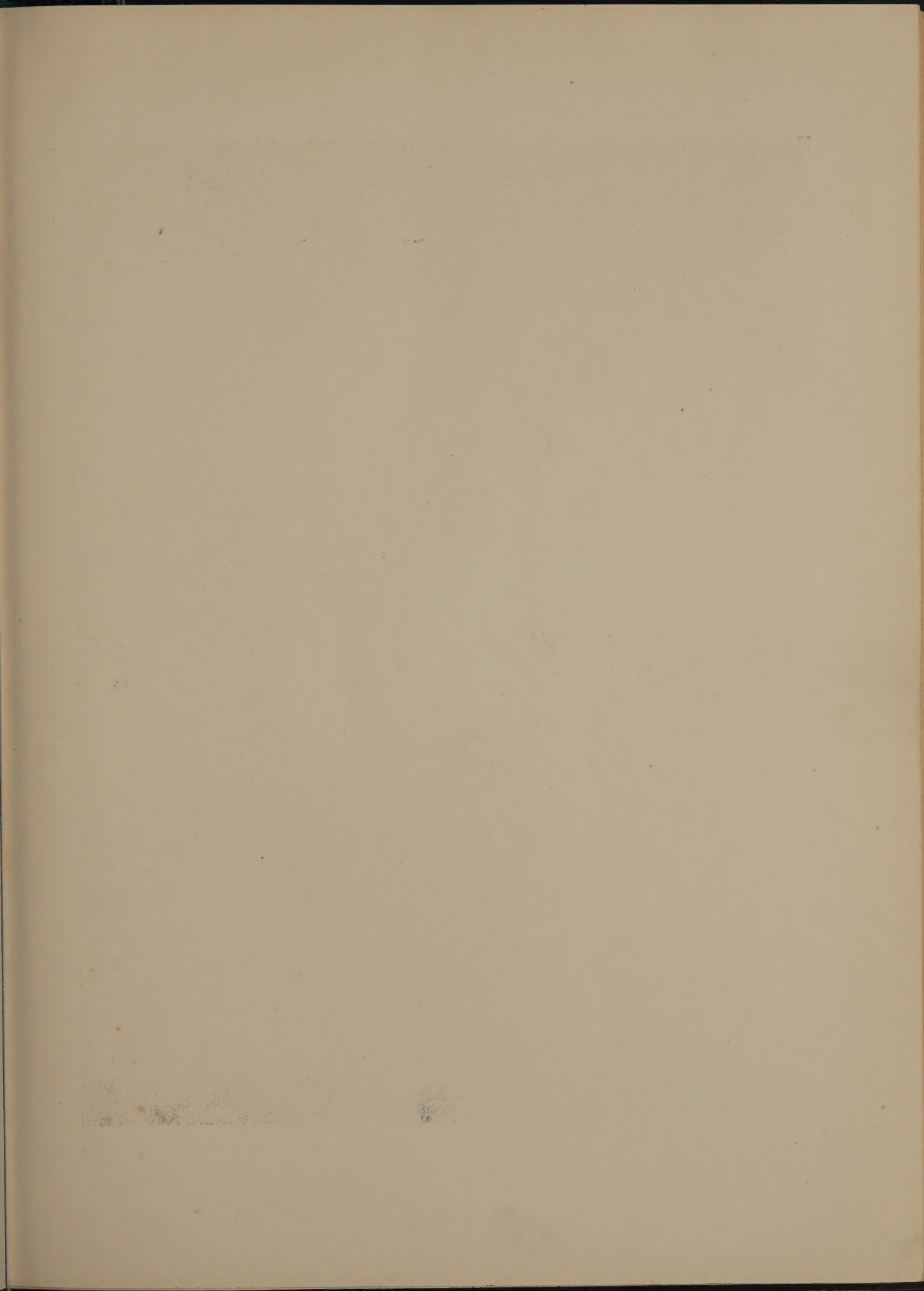
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HISTORY OF
NORTHWESTERN PENNSYLVANIA







Gudgeonville Covered Bridge Over Elk Creek, Erie County

(Photo by Walter Jack)

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HISTORY OF NORTHWESTERN PENNSYLVANIA

Comprising the Counties of

ERIE, CRAWFORD, MERCER, VENANGO,
WARREN, FOREST, CLARION, McKEAN, ELK,
JEFFERSON, CAMERON AND CLEARFIELD

By

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President of The Allegheny River Improvement Association*

VOLUME II

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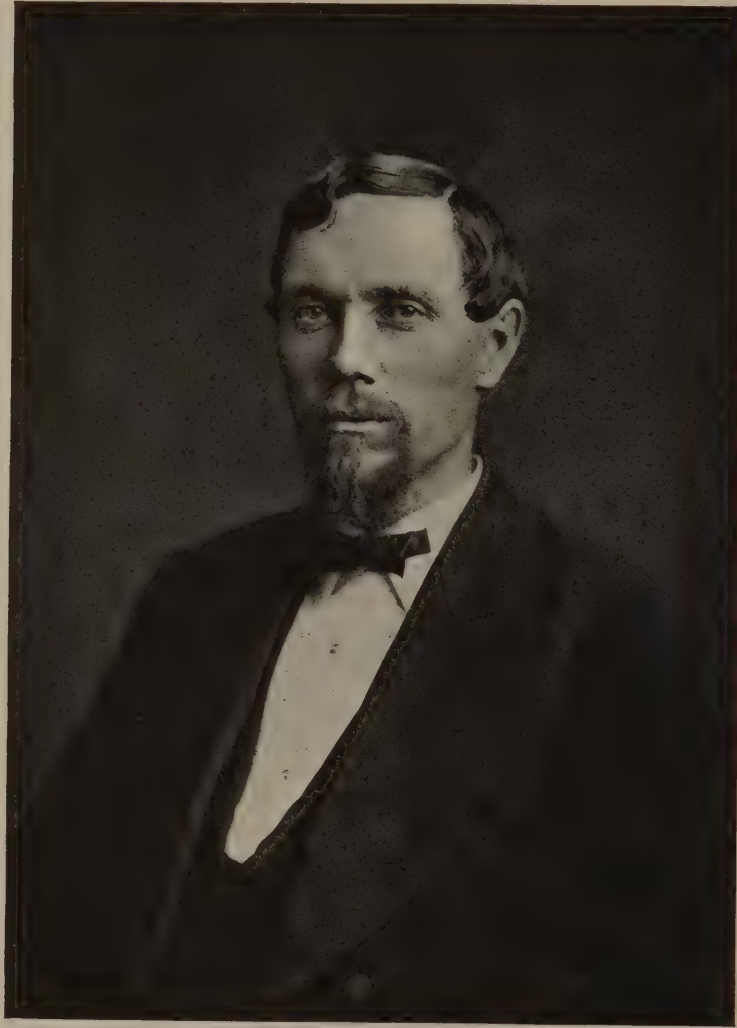
CHAPTER XI

The Press

One striking difference between the development of the newspaper business in eastern and western Pennsylvania is that in the east there were few newspapers during the first hundred years after the arrival of William Penn and relatively few secular publications until the nineteenth century. In the west, particularly northwestern Pennsylvania, papers were started within a decade after its counties were set up, and in a few places a printer had appeared on the scene at about the time the county government was organized. The Fourth Estate came in with the clergy and the educator and coöperated with these in the advancement of knowledge, good citizenship and promotion of the best interests of the community.

Even the evolution of the press in the west differed from the east, in that a western press was first used to print a newspaper, then for advertising sheets and eventually pamphlets or rarely books. Less than three years after Penn came to the future "City of Brotherly Love" he had imported a press. He was a publicist or "pamphleteer," who in his youth had been jailed in London Tower for his published writings, a punishment that only fixed his faith in the power and value of the printed word, whether as propaganda, advertising, or just keeping one's name before the public. The English Colonial authorities did not agree with Penn's opinions, and that first press, whose first work was an almanac for the year 1686, was five years later confiscated by a local official because one William Bradford had printed a "libelous and seditious pamphlet which tended to weaken the hand of the city magistrate." It may be noted that the printing industry was frowned upon by the British and there was only spasmodic "Freedom of the Press" until after the Revolution. Incidentally, until after the Revolution, there were few publications in our country that could be called newspapers in the sense of regular issues. News sheets generally were an adjunct to hand-press editions of books and pamphlets, set up occasionally upon the arrival of some

vessel from abroad, with news and a cargo to be sold. The principal requirement of the proprietor of a print shop was an ability to set type and to make clear impressions therefrom. On a pioneer news-



(Courtesy of "Jeffersonian Democrat," Brookville)

Major John McMurray, Editor "Jeffersonian Democrat,"
Member Constitutional Convention of 1873. Died 1920

paper one must be reporter, writer, editor and jack-of-all-trades. Before leaving the east let us make a bow to Benjamin Franklin, "Father of the newspaper in America," and his semi-weekly of 1729, "The Universal Instructor in all Arts & Sciences and Pennsylvania Gazette."

The conditions under which journalism was inaugurated in northwestern Pennsylvania, two or three decades or so after the organization of the United States, were the direct effects of the tidal wave of migrations to new lands beyond the mountains, and a somewhat unexplainable rise of tide in the establishment of newspapers in all parts of the country. It is easy to understand that those who had left their homes and were seeking a livelihood in what were then distant places should want some medium which gave them the news of back east, together with that of the new region. The wandering journeyman printer had to make a living like anybody else, and would rather do it with his trade than carve a farm out of the forest. It was an easy thing, comparatively, to start a newspaper. The prospective proprietor would canvass his neighbors within a reasonable distance, secure sufficient subscriptions to buy type or even a press, and then set himself up in business to continue until he was starved out, or the wanderlust impelled him to pack up his simple equipment and move on to greener pasture. Even more frequently he sold his primitive plant to someone more gifted with optimism than a knowledge of a highly difficult trade. One factor that promoted papers in small hamlets was the numerous and enthusiastic adherents of political parties or proponents of social, religious and other movements. The ambitious politician, seeking office, or the advocates of some extraordinary doctrines, often furnished capital to an itinerant printer. Then there was always political patronage, including high prices for much legal advertising. Whether this had anything to do with the fact that most first newspapers established in a county were located in the shiretown, even when smaller than other settlements, is anybody's guess.

Without cynicism or any pretense at superiority, let it be recognized that the pioneer publishers of northwestern Pennsylvania did a hard job exceptionally well. Journalism always has been a speculative enterprise dependent upon public support. In the old days circulation was of necessity small; national or international news was little and late, depending upon the last comer from the coastal sections; and local gossip had been rehashed before it appeared in print. Illustrations were lacking or few; there were no wire services or syndicates, and "boiler plate" was a later Godsend. Northwestern Pennsylvania has been a graveyard of newspapers, a region in which many were born and interred before they had played any important rôle on the stage of public affairs. This is something than can be said of almost any part of the United States. The press requires no apolo-

gies; its activities have gone hand in hand with the developments which it chronicled. Editors and publishers have been to the fore in movements that have made for the best in community life. Day by day or week by week the newspapers have recorded the annals of their times, and make the best source of history. Two of the most interesting features of the Fourth Estate in northwestern Pennsylvania counties are, the longevity of a number of publications, and the extended terms of service rendered by families and individuals, as publishers and editors, to the press and to their communities.

Crawford County—The palm for pioneering in northwestern Pennsylvania journalism goes to Crawford County in general, and to Meadville, the county seat, in particular. This fine city of nearly twenty thousand residents, and since the formation of the county its metropolis, has a record of 137 years in newspaper publication, a record that no other county in this part of the State can equal for length. In 1805 "The Weekly Crawford Messenger" was founded, the fourth oldest newspaper printed west of Pittsburgh, and the first paper published north of this city and west of the Allegheny Mountains, in other words the first journal to be initiated in northwestern Pennsylvania.

Drawing freely, almost exactly, from the sesqui-centennial edition (1938) of the "Tribune-Republican" of Meadville, "The Weekly Crawford Messenger" put out its first copy on January 2, 1805, and was continued in varying forms until 1821. Thomas Atkinson and W. Brendle were the editors, typesetters, printers, and delivery boys of the "Messenger." It was published in a two-story log house with clapboard roof on the northwest corner of Center Street and Mulberry Alley. Their paper, which was a four-page sheet, of four columns each, was printed upon a hand press from type brought by boat from Pittsburgh. The paper stock was for several years carried from Pittsburgh on pack horses, through forest paths and over bridgeless streams.

The press was an exact reproduction of that of Benjamin Franklin, built of solid mahogany, and upon it had been printed the Continental money when, upon the occupation of Philadelphia by the British in 1777-78, Congress moved to Lancaster and York. It had been taken to Pittsburgh by wagon and from there, together with its font of type, conveyed to Meadville up the Allegheny River and French Creek by batteaux. It was one of the first printing presses brought into the State of Pennsylvania and after its operation in Meadville was shipped to Warren County.

On July 3, 1805, Atkinson & Brendle dissolved partnership and Atkinson continued to publish the "Messenger" every Wednesday morning at his place of business on the corner of Center Street and Mulberry Alley. On August 11, 1820, Mr. Atkinson announced that James Buchanan was associated with the paper and the publishing firm name was changed to Atkinson & Company. In 1822, from March to September, publication was suspended.

About 1825 the office was moved to the east side of the public square and, in 1827, a notice in the paper stated that the office was located one door south of the new courthouse. In 1833 Atkinson sold the paper to Joseph C. G. Kennedy, whose name first appeared at the head of the paper in the March 30 issue. Although Mr. Kennedy published the paper only to November 7, 1835, when it was discontinued, the "Messenger" was the first in a chain of Democratic, Whig and Republican newspapers that persisted until 1921.

The same anonymous writer also brought out the interesting facts that practically all the newspapers established here (Meadville) during the past 150 years have at one time been consolidated with or replaced by those represented in these three continuous groups of publications. For facility in writing of them they might well be classified according to their political views. One was as continuously and vigorously Democratic as another was Republican. The third started as a Democratic paper, became a Whig journal, changed to Republican ownership and in the last two years of its life was conducted again by Democratic owners. For simplicity, we speak of those in the last group as the Whig papers. Thus, the Whigs, Republicans and Democrats were represented in Meadville publication. Of the three, the Republican group is represented today (1938), having absorbed the Whig group, while the Democratic line was discontinued. The trend toward consolidation, so obvious in present-day journalism, is found very clearly in the history of newspapers in Meadville.

As a sort of footnote to the foregoing, it may be pointed out that the nomenclature of the political parties changed frequently in the first six decades of the American Union, and is confusing to modern readers. The first Republicans became Democrats, and that Democratic party ultimately split into all sorts of divisions. During Washington's first administration political factions began to form and Thomas Jefferson, in 1789, as Secretary of State in the Washington Cabinet, won recognition as "the leader of the Republican Party," as opposed to the dominant Federalists. Some years after his retirement to

private life in 1805, the Federalist party declined to insignificance and the Republicans, also called Democrat-Republicans, rose to power. But it was not until nearly twenty years later, or about two years before Jefferson died well past fourscore years of age, that the term Republican was completely dropped, or after the elections of 1824. Many authorities assert that there was no national Democratic party—without prefixed or limiting words—prior to 1821. The term Whig was then resuscitated and applied to, not chosen by, the opponents of the Democrats. The Whigs were without power until the agitation over slavery induced the formation of a new party by recruits from the ranks of the Democrats, Whigs, Abolitionists, Free Soilers, Know Nothings and other recalcitrants, organized in 1854, a party for which the name Republican was revived from the past. All the aforesaid is not intended to recite any lesson in political party history, or to incite to any controversy, any more than to remark that the differences between the major parties for the past many years have been too minute to be worthy of any rise in blood pressure. All that we are endeavoring to indicate is that there were many and strange political parties in the early stages of newspaper developments in northwestern Pennsylvania; that politics entered so potently into the establishment and conduct of the journals of that period—one of the very best reasons for starting a newspaper in some town was the fact that there was already one there representing some party; and that there was such a variety of political faiths and such violent adherence to them, that one cannot read any history of the press without giving great weight to the political motive. It also may be that the "Tribune-Republican" writer was impressed by the coincidence that "The Weekly Crawford Messenger" arrived on the scene in 1805, when Thomas Jefferson was reëlected to his second term as President, and wound up its noteworthy career almost a decade after the demise of the "Sage of Monticello." During the three decades of its existence, many, perhaps too many, newspapers were born and died in northwestern Pennsylvania.

Returning to Meadville—which has had more than forty weekly and semi-weekly papers, not to include a number of dailies, during its 137 years of journalistic history: Its second newspaper, "The Western Standard," was initiated by Joseph D. Lowrey, in 1819. The third, in order of establishment, was "The Meadville Gazette," a Jacksonian sheet started on March 18, 1828, by Jacob Williamson, former editor of "The Mercer Gazette." Both papers had short lives.

What the present "Tribune-Republican" calls "the beginning of the second line of newspapers in Meadville" was signalized on June 13, 1830, when the "Western Star" was published by William M. Whittey & Company. In April, 1831, it was sold to W. W. Perkins, who changed its name to the "Meadville Courier." During the following year, a Democratic editor, William McLaughlin, bought an interest in the publication, and on February 20, 1833, the whole newspaper and plant were sold to Samuel W. Magill and a Mr. McLaughlin. During all this time the "Courier" had been issued from a courthouse room on the west side of the public square in Meadville. Its headquarters thereafter, for a time, were in the rear of Magill's drug store at the corner of Dock and Water streets. Evidently the properties of the two publishers had been combined, for in a division of interests, on March 27, 1833, Magill took his drug store and McLaughlin received the newspaper, the latter within a month removing the plant elsewhere on Water Street, the first of several more changes within a few years. Mention has been made of this rapid sequence of ownership, editorial policies and locations, simply as illustrative of conditions that were nothing unusual in the journalism of our elders. Money investment and equipment were small, and most everybody had an urge to immortalize himself in print, especially those who had some dollars to spare and felt that they could run a newspaper better than their predecessors. In 1837 the "Meadville Courier" was sold to James E. McFarland. From first to last the existence of the "Meadville Courier" was only five years.

A new figure entering Meadville journalism, more than a century ago, was James E. McFarland. On August 25, 1835, he founded in Meadville the "Crawford Democrat and Northwestern Advertiser." A year later he seems to have realized that the title of his sheet covered too much territory, for he dropped the "Northwestern Advertiser," part. In 1837, McFarland absorbed the "Meadville Courier" and the paper was printed as the "Crawford Democrat and Meadville Courier." On May 19, 1840, it became simply the "Crawford Democrat," which he published successfully for a quarter of a century. James E., or Colonel, McFarland was one of the outstanding figures in Meadville and Crawford County affairs—journalism, politics, banking. He filled capably a number of local and county offices, was postmaster of Meadville, and was a one-time candidate for Congress. A staunch Democrat in early years, he was just as loyal a Republican during and after the Civil War. At the time of his death on December 1, 1899, he was president of the Merchants

National Bank. McFarland remained in control of the "Crawford Democrat" until April 28, 1857, when this leading Democratic journal passed into the hands of William Willson, who conducted it to April 30, 1861, when it was sold to Thomas W. Grayson, of Washington, Pennsylvania, who published it for twenty-three years. On June 5, 1884, because of failing health, he disposed of it to Murphy & Nichols of the "Democratic Messenger."

To name a few of the other pioneer newspapers of Meadville, some of which eventually became identified with the "Democrat," we go back to "The Statesman," whose first issue came out on July 27, 1836, as the successor to the original "Weekly Crawford Messenger," although there had been a lapse of half a year since Joseph C. G. Kennedy ceased publishing the "Messenger." The changes in name, but not of management, during the first few years of "The Statesman" were: "Statesman and Crawford County Free Press," January 24, 1837; "Crawford Statesman and Independent Press," 1838; "Crawford Statesman and Free Press," July 27, 1839. Joseph C. Hays, an expert printer, was the founder of "The Statesman," and continued its head until he accepted appointment as postmaster of Meadville in May, 1841. He had been identified with several journals before coming to Crawford County, and in January, 1848, returned to journalism as publisher of the "Crawford Journal." Some predecessors of this publication were: The "American Citizen," August 17, 1842; "Crawford Statesman and People's Press"; which was followed by the "Democratic Republican," August 24, 1842, which ceased publication in 1848 when sold to Joseph C. Hays, who immediately began the issue of the "Democratic Whig Journal," January 13, 1848. Two years later he acquired the "Meadville Gazette," and named his publication the "Gazette and Whig Journal." The "Gazette and Farmer's Advocate" was started in 1844 by Louis L. Lord, who changed the title page to the "Meadville Gazette," April 10, 1847, and was its editor when Hays consolidated the two Whig papers, as above.

As already indicated the Whig party was never strong nationally, but its adherents certainly stirred up a lot of controversy, especially as many members of the party began to be anti-slavery and abolitionists. Colonel Joseph C. Hays ran his "abolitionist sheet" very much as he pleased until 1864. He was a delegate to the National Republican Convention that in 1861 nominated Abraham Lincoln for President. He served the community exceptionally well, and at his death, in 1891, one of his two sons, John B. Hays, was carrying forward the

journalistic tradition of the elder man with the "New York Times," of which he became political editor.

For many reasons, chief of which is the feature that the "Crawford Journal" has the almost unique honor of carrying on in northwestern Pennsylvania under this name for almost two-thirds of a century, we quote from an article in its present-day successor certain factual items: Hays continued in charge of the paper until 1864, when it was sold to John C. Nicholas. The name had been changed in 1852 to the "Crawford County Whig Journal," and in 1855 to the "Crawford Journal"—a name which it bore under successive management for sixty-five years. Hays' office was in Otterstatter's new building, directly opposite the American Hotel.

The "Crawford Journal" was an eight-page newspaper issued every Friday from its office on Chestnut Street and was an organ of the American party. And from the birth of the Republican party it was an unswerving advocate of that political faith, remaining so until 1919.

In December, 1865, the office was burned down and the following spring the "Journal" was reissued by Edward Bliss and John C. Nicholas, who ran it until April, 1867, following which it was successively under the editorial control of Thomas McKean; McKean & Frey; Johnson & McKean; McKean & Andrews; Robert Andrews & Company; Hollister & Metcalf; Chalfant & Tyler; Colonel C. W. Tyler; and Thickstun & Hollister. Colonel Tyler purchased the plant in 1869, after disposing of his interests in the "Daily" and "Weekly Republican," and conducted the paper until 1872, when he retired permanently from the printing business. His offices were in the Betts Block on Water Street.

Ernest A. Hempstead came to Meadville in 1870, entering the office of the "Crawford Journal" in the Betts Block, to learn the printing trade. On January 1, 1873, he took editorial charge during the absence of L. W. Thickstun at Harrisburg. The following April he became publisher. In June, 1874, with his father, O. G. Hempstead, he purchased the office and in 1883 bought out his father.

The "Journal," under Mr. Hempstead, was an eight-page sheet, issued every Friday. About 1880 he moved his printing plant from the Betts Block to Nos. 218-20 Chestnut Street, over Tanner's Clothing Store—the present location of Prenatt's clothing store. In 1885 it claimed a circulation of two thousand copies and was considered a powerful exponent of Republican politics. About 1892, Mr. Hempstead brought to Meadville the first linotype machine and it was oper-

ated by Samuel Postance. In 1903, E. H. Shartle became associated with Mr. Hempstead and the Crawford Journal Printing Company was organized. Mr. Hempstead was president and editor and Mr. Shartle was secretary-treasurer, associate editor and business manager. In April, 1903, the Journal printing establishment was moved to the new Journal Building on Park Avenue at the corner of Cherry Alley.

In January, 1907, Messrs. Hempstead and Shartle purchased the "Meadville Morning Star" and the "Meadville Semi-Weekly Gazette" from McCoy and Calvin. A new organization, the Star Company, was formed with E. A. Hempstead, president and editor; A. W. McCoy, vice-president; and E. H. Shartle, secretary-treasurer, associate editor and business manager. On January 31, 1907, the "Gazette" and the "Journal" were combined and a total circulation of three thousand copies was claimed. For a time the publication was called the "Crawford Journal-Gazette," but on May 2, 1907, the name "Gazette" was dropped and the "Journal" continued its own identity. That same year the firm brought to Meadville the first newspaper press operating with rolled paper and in a short time a similar machine was purchased by the Tribune Publishing Company. Hempstead & Shartle were associated until 1909, when the "Journal" was sold to The Tribune Publishing Company. Even this was not the end of an ancient and honored name, for from August, 1909, to 1919, it was published by The Tribune Publishing Company as the "Crawford Journal." As the "Messenger-Journal" it was discontinued in 1921.

The third important chain of weekly, or semi-weekly, newspapers in Crawford County forged its first link in 1850, with the founding of the "Cassewago Chronicle," by one George Youngson, that in 1853 under Harper Mitchell and S. Sears became the "Semi-Weekly Spirit of the Age." In 1860 Alexander Myers became proprietor. Its lineal descendant was the "Meadville Republican," which Mr. Myers began to publish at once (1860). Five years later he sold the "Meadville Republican" to R. Lytle White, who in September of that year inaugurated the "Meadville Daily Republican," of which further. The weekly edition, as was not unusual, was continued under varied editors and publishers, notably Colonel J. W. H. Reisinger (who called it the "Meadville Dollar Republican"), and Dr. T. L. Flood.

Colonel Reisinger also began printing the "Meadville Index," which originated in Cambridge Springs, Crawford County, in 1869.

The "Index" and "Republican" were merged in 1881, March 20. Almost exactly three years later Dr. Flood sold out to W. R. Andrews, publisher of the daily, Sunday and weekly "Meadville Tribune." "The Tribune" had been founded by Mr. Andrews on August 11, 1884. On January 13, 1885, the daily "Tribune" and the daily "Republican" were consolidated under the control of W. R. Andrews and issued as the "Morning Tribune-Republican" and the "Evening Republican." On April 13, 1885, the weekly papers were combined as the "Tribune-Republican." Colonel Reisinger also started the "Meadville Gazette" in 1886, and in 1891 began the publication of the "Daily Morning Star." The "Gazette" sold its plant to The Tribune Publishing Company in 1903.

Some future historians will dig up many other Meadville, Crawford County, publications for comment, such as the "Allegheny Magazine" (1816-17); the "Unitarian Essayist" (1831-32); the "Pennsylvania Farmer" (1881-1912), a most interesting journal that probably is still carried on under the name the "Pennsylvania Farmer and Stockman" of Pittsburgh. Then there was the "Sledge Hammer" (1895-97), and then for a short time was "The Peoples Advocate," they being one of those political enterprises that worked mainly for the election of one or two men to public office. It made its appeal to the Populists, Prohibitionists, disappointed Democrats and soured Republicans. In 1893, there was for a few months "The Chatter," a well-named weekly. The "Meadville Freie Presse" (1889-95), which became the "National Gazette," was formerly one of the best known German papers in Pennsylvania, but never was highly successful. The "Independent" of 1927 published for a few months in the summer; and the "Chautauquan" (Dr. T. L. Flood), brought to Meadville from Jamestown, New York, soon went back there; the "Herald" (1886-87), the "Vindicator" (1879 to 1882), were among the many unimportant publications in the Meadville of the past. One of the most modern (1933) papers, "The New Deal," came flying in on the coat-tails of the present administration, and skidded out again after an issue of some twenty-five copies.

So much space has been given to the story of weekly newspapers in Meadville that little remains for consideration of one of the most interesting features of local newspaperdom, the publication of dailies. Meadville has never been a large city, although it is the center of a large area of Crawford County. It has been remarkable in being able to maintain daily editions since the close of the Civil War, when R. Lytle White started the "Daily Republican," in 1865.

White seems to have been reporter, printer, editor and publisher of the sheet, which was mainly devoted to local news and reprints of clippings on the happenings outside of Crawford County, domestic and foreign. After two years he was joined by Colonel C. W. Tyler and they got out both the "Daily" and the "Weekly Republican." Two years later, 1869, J. T. Herrington, J. C. Hays and George C. Morgan joined the enterprise to form White & Company, publishers. On the third anniversary of the launching of his daily, Editor White wrote: "We have sunk several thousand dollars in giving Meadville a daily newspaper. Our daily is now a trifle larger than the 'New York Sun.'"

The subscription price was \$6.00 annually or twelve cents a week when delivered by carrier to one's home. Colonel Reisinger, of previous mention, was editor and publisher of the journal for thirteen years, but from July 13, 1872, as the "Evening Republican." The "Republican" is the present evening daily paper of Meadville.

The first daily morning paper in Meadville was "The Morning Reporter," started in August, 1877, by Samuel B. S. Longood, who within a year sold it to William S. Orr and Hiram Williams, of the "Weekly Democratic Messenger." The "Daily Tribune," forerunner of the first substantial morning newspaper, was founded on August 11, 1884, by Wesley R. Andrews. It created something of a stir in the community by carrying, from the first, Associated Press telegraph dispatches. At last it was possible to read news from the Nation and the world, within hours instead of days after the events. Andrews had the knack of getting good men to work with him, and himself became prominent in politics, at one time receiving a great deal of support as a prospective candidate for the governorship of Pennsylvania. Although larger activities caused him to be away from Meadville during the last years of his life, he retained his citizenship here and was ever a generous contributor to the best interests of the city.

On January 13, 1885, the two daily papers were consolidated under the management of Colonel Andrews, the dailies being known as the morning "Tribune-Republican" and "The Evening Republican." They were the only dailies in the city. It was not until April, however, that the weeklies were combined as the weekly "Tribune-Republican." "The Evening Republican" was continued under the new management for only about three months when publication was discontinued. However, on November 11, 1887, the afternoon edition was resumed, being called "The Evening Republican," and making use of Colonel Andrews' franchise on the day report of The Associated Press, which was known then as the Western Associated Press.

On January 1, 1886, when only the morning edition was published, Captain H. S. Phillips came to work for Colonel Andrews as news editor—a position which he occupied with "The Tribune-Republican" until failing health compelled his retirement on October 10 1932, after a continuous service of almost forty-seven years in one position.

In December, 1890, the morning paper was discontinued. And an announcement in the paper read:

"Beginning Monday, December 8, 1890, 'The Tribune-Republican' will be published in the afternoon instead of in the morning and will enlarged to eight pages. Two editions will be printed each weekday afternoon, one at 3 o'clock and one at 5 o'clock."

This arrangement lasted only until July, 1891, however, when the morning edition was resumed. The appearance of the daily "Morning Star" in January of 1891 made Colonel Andrews change his mind about abandoning the morning field.

Colonel Andrews remained as editor and proprietor of the two dailies and the weekly until January, 1893, when he was called to wider fields. He retained possession of the papers, however, but Colonel Reisinger—the former publisher—assumed charge of the editorial department. Within a short time he was succeeded by Captain Phillips, who was in editorial charge of the papers until May, 1899.

"The Tribune-Republican" had been founded as the first Meadville newspaper to receive full telegraphic news reports by wire, but because of the public's failure to fully appreciate the value of such service, that feature was eliminated for a few years during the ownership of Colonel Andrews.

"The Tribune-Republican" group was not alone in its field, for in 1882 the "Morning News" made its appearance, and three years later was combined with the "Tribune-Republican." "The Morning Star" rose in 1891 and set in 1895, the control eventually going to the "Tribune-Republican." The "Daily Messenger," an evening edition of the "Crawford Democrat and Messenger," made its bow to the public in May, 1903, and on November 23, 1904, changed to a morning edition. The publication went into receivership in 1911, but was continued until April 30, 1919, when it was absorbed by the "Tribune-Republican." Other very short-lived daily newspapers in Meadville included the "Silver Banner" and the "Evening Sun."

In March, 1899, a serious blaze in the Corinthian Block on Water Street severely damaged the plant of "The Tribune-Republican," and it was offered for sale by Mr. Andrews. On May 24, 1899, it was purchased by Major Walter Irving Bates and his brother, Hon. Arthur L. Bates, who had political ambitions and desired an organ for the expression of his political beliefs. Major Bates had read law in the office of his brother for several years and had been admitted to practice in the Crawford County bar. Natural literary talents and business enterprise attracted him to the field of journalism. The brothers formed a partnership in the purchase of "The Tribune-Republican" and Major Walter Irving Bates was placed in charge as managing editor.

In retrospect, the red letter days in the history of "The Tribune-Republican," under the management of the Bates brothers, came frequently and were many. In 1899 it bought its first linotype machine and two years later purchased another. A fifteen horsepower gas engine drove a variety of equipment. On May 11, 1904, there was installed a new Miehle job and newspaper press, "Largest and finest ever in Meadville." In 1904 "The Tribune-Republican" improved its format and increased the number of pages. On June 1, 1901, the paper boasted of its new angle bar Cox Duplex perfecting press that "surpassed any similar machine in the vicinity." In 1907 electric motors were installed to aid the gas engine. In March, 1908, the first stock exchange quotations were given, and in November of that year news service was speeded up by a direct wire to the "New York Sun." "This was considered the greatest venture ever undertaken by a Meadville newspaper." In 1914 the morning paper was granted membership in the Associated Press. (On November 16, 1921, the "Evening Republican" was admitted to the same press service.) Of course, the telephone, telegraph and even the radio have contributed their share in modern speedy distribution of the news. The Tribune Publishing Company erected a new brick building on Federal Street, in 1914, and in it was installed the first rotary newspaper press to be introduced into Meadville. A new section of this was purchased in 1920, and still a third in 1929, when an addition was made to the building. The Tribune Publishing Company has been incorporated since November, 1906. Of the men who have helped "make" the company and its papers during the present century were: Captain H. S. Phillips, new editor and vice-president in 1907, who retired in 1932 and was succeeded by Kenneth P. Williams. The captain had learned the printer's trade just after the Civil War and worked in

Meadville from 1885, when he took over "The Messenger." Edgar H. Sackett spent twenty-six years with the Tribune Company and its publications prior to 1929. Charles B. Menold was reporter, editor until 1923. Of this fine group and many who came and remained, the leader was Walter Irving Bates. Born in Meadville, a student at Allegheny College and The Sorbonne, Paris, he was twenty-six years of age when he purchased "The Tribune-Republican" in 1899, to which he gave his best abilities and energies as publisher and editor to his death on May 5, 1934. His interests were many, his activities large, his service to the community truly great. In 1901 Mr. Bates married Marion Sackett, and their four children—Mrs. Merwin Shryock, Mrs. Donald W. Gapp, Edward Irving Bates and Robert S. Bates—are the publishers of "The Tribune-Republican" and the "Evening Republican." Robert S. Bates is editor of the two papers, carrying the burden and responsibilities that his father, Walter Irving Bates bore so well for thirty-five years.

Titusville, the second largest place in Crawford County, famed since the discovery of oil in this part of Pennsylvania, is the home of the strong and influential "Herald," the only daily (except Sunday) newspaper published outside the county seat. Its history traces back to 1865, and its present editor is Edgar T. Stevenson, a well-known figure in western Pennsylvania journalism. The paper is issued by the Titusville Herald Company, Inc., and has the remarkable record of possessing a circulation equal to about five-eighths of the population of the city in which it is printed. Using the family basis of statistics, the "Herald" serves a greater number of families than there are in Titusville, indicating how marked is its popularity in neighboring towns and counties.

Cambridge Springs, a place where drilling for petroleum led to the discovery of mineral springs, and many years of resort popularity, has the "Enterprise-News," the only paper in Crawford County published twice a week, appearing on Mondays and Thursdays. Drawing upon an article of Allen Rust Maxwell for excerpts from an account of its founding: The first newspaper venture in Cambridge Springs, then known as Cambridge, was made in 1869, when the "Index," a small sixteen-page monthly in magazine form, was printed by A. W. Howe. It gradually was enlarged and then issued as a weekly, and in October, 1877, removed to Meadville, where it soon died. Shortly after its removal, "The News" was started by W. L. Percy, its first copy coming out on November 1, 1877. On April 1, 1883, it was sold to A. F. Moses and George L. Wade. In July,

1884, Mr. Wade sold his interest to his partner, who on April 1, 1888, disposed of the paper and plant to Clark D. and Charles E. Eckles.

In June, 1892, George L. Wade established "The Enterprise," which seems to have been successful from its initiation. Harvey L. Lamb secured a half interest in it, in 1894; and A. F. Moses an equal share in May, 1896. On July 1, 1897, the "Enterprise" became a semi-weekly paper, without any advance in subscription price. George L. Wade purchased the going concern from Moses & Lamb in 1900, and sold it to Harry J. LeFeyer in 1915, who on April 1, 1916, disposed of it to William P. Rose. The merger with the "News" was consummated on March 1, 1922, and a fine plant was constructed and equipped in 1928, "the finest quarters to be found outside of the daily field in Western Pennsylvania." A big and modern automatic press was installed and down the years all necessary equipment has been installed. The Cambridge Springs "Enterprise-News" enjoys the reputation of having no superior and only one equal in the field of semi-weekly newspapers in northwestern Pennsylvania. Arden Dean is editor; Will Rose publisher.

Of the weeklies in Crawford County are: "The Times," of Cochranton, founded in 1878, published on Thursday by the Robinson Brothers under the editorship of James R. Robinson; "The Breeze," of Conneaut Lake, a Thursday publication, started in 1922, of which M. E. Barton is editor and publisher; "The Herald," of Linesville, founded in 1880, which at the present time comes out on Thursday, under the direction of S. W. K. Lowing, editor and publisher; and the "Conneautville Courier," oldest of them all. The outline history of the latter as supplied by C. B. Robinson, its editor, is:

"The Courier was established November 14, 1847, by A. T. Mead and George W. Brown. A year later Mr. Brown became sole owner, and in October 1854, he sold the paper to A. J. Mason and Daniel Sinclair. In 1856 Mason purchased Sinclair's interest and in 1862 sold the paper to R. C. and J. H. Frey, to accept the command of a company in the Union forces. He was fatally wounded at Fredericksburg, Virginia. In February 1864, the Frey brothers sold the 'Courier' to J. E. and W. A. Rupert, publishers of the 'Crawford County Record.' After purchasing the 'Courier' they published the consolidated papers, under the title 'Record and Courier' until 1870, when the old name 'Conneautville Courier,' was restored by them. They continued to issue the 'Courier' until April 1,

1894, when J. E. Rupert bought the interest of his brother, W. A. Rupert. April 1, 1897, J. E. Rupert took his son into partnership with him, the firm being known as James E. Rupert & Son until April 3, 1918, when Neill M. Robinson took possession as owner. Mr. Robinson died during the influenza epidemic in November 1918.

"January 1, 1919, Margaret R. Spaulding became owner and continued to issue the paper until she died on June 8, 1930, when her husband, D. W. Spaulding became the owner. He sold the paper on February 16, 1931, to J. Stephen Allen and C. B. Robinson, who continued to issue the paper until September 29, 1941, when Mr. Allen retired on account of his health. C. B. Robinson and S. L. Bossard, the present owners, bought Mr. Allen's interest, taking possession September 29, 1941.

"Mr. George W. Brown, one of the founders of the 'Courier,' after leaving Conneautville in 1855, established the first paper in the State of Kansas, at Independence. After leaving Kansas he lived at Rockford, Illinois, where he died in 1915 at the age of ninety-four years."

Erie County—It has been said of Erie that "it has been the most prolific in the birth of newspapers and possesses the largest graveyard of these children of former years." Whether the reference was to the city or county in that statement, or with what section the comparison was made, the compiler does not know. If it took more than forty publications to form the background of the two newspapers of Meadville, four or more times as many were forerunners of the present Erie "Dispatch-Herald" and the "Times," city dailies of large circulation. The picture of these two journals rising on the remains of a hundred or two former youthful enterprises is too horrible to contemplate, and will not be depicted in this chapter. It probably would not be true to life anyway, although every newspaper in Erie City, and such county cities and boroughs as Corry, Albion, Edinboro, Girard, North East, Union City, and Waterford, each might relate gruesome tales of their predecessors.

John Miller, in his "History of Erie County," now almost out of print since it was published a third of a century ago says there were more than fifty newspapers and periodicals started in the city of Erie prior to the turn into the present century. He also quotes an old-timer as declaring that "Erie is no newspaper town anyway," based on the

fact that until after the 1900s there was only "one publisher since 1808 who had contrived to make a competence out of the business in Erie." On the other side are the records that so many tried their hands at journalism during the first century of the Fourth Estate in Erie is evidence that it was looked upon by a long procession of men as a good newspaper town; and that their very number was one of the causes of removals to less competitive sections. Failures were too often due to shoestring ventures where the string was too short and fragile.

It seems quite agreed that the history of newspapers in Erie, city or county, must begin with "The Mirror," founded in 1808, when the whole county had a population of about two thousand, and the hamlet Erie had less than four hundred. Its founder was George Wyeth, and the purpose of the sheet was to spread the gospel of the "Federal Constitutional Republican" politicians. What that signified is something of a mystery to the historian who knows that the two main parties of that day were the Federalist and the so-called Republican. There are few copies of "The Mirror" that have been preserved, and these show it to have been ten by sixteen inches in size, and sold, when it did, for two dollars per annum. It did not last long enough to cast many reflections upon any subject, least of all the purpose for which it had been inaugurated. In 1812, its successor was the "Northern Sentinel," of R. J. Curtis, which became "The Genius of the Lakes," published by John Morris and R. J. Curtis; and later was known as "The Phoenix" and "The Reflector," under which name it is supposed to have removed to Mayville, county seat of Chautauqua, New York. There it must have given up the ghost, for its advent is not reflected in the history of Chautauqua County journalism. In Erie there was also "The Patriot," started by one Zeb Willis, in 1818, that after a year removed to Cleveland, where it is now claimed as the progenitor of one of Ohio's oldest and strongest newspapers.

The real story of the development of newspaperdom in Erie dates from January 15, 1820, and the initiation of a publication by Joseph M. Sterrett, who gave it a name that was not only popular among the early journals of the United States, but one that, all-in-all, proved to be the most lucky. Yes, you have guessed it, the title was "The Gazette." Erie town at that period had a population of 635 souls. Its frequently difficult existence covered seventy years. It was followed a decade later by the "Observer," which was published for sixty-seven years. The "Dispatch" came along about twenty years

later; the "Erie Herald" was born in 1878, and the "Erie Daily Times" in 1888. Of these pioneer predecessors of present-day newspapers, further; but right here let us turn to a chronology of former newspapers, and the years in which they first appeared:

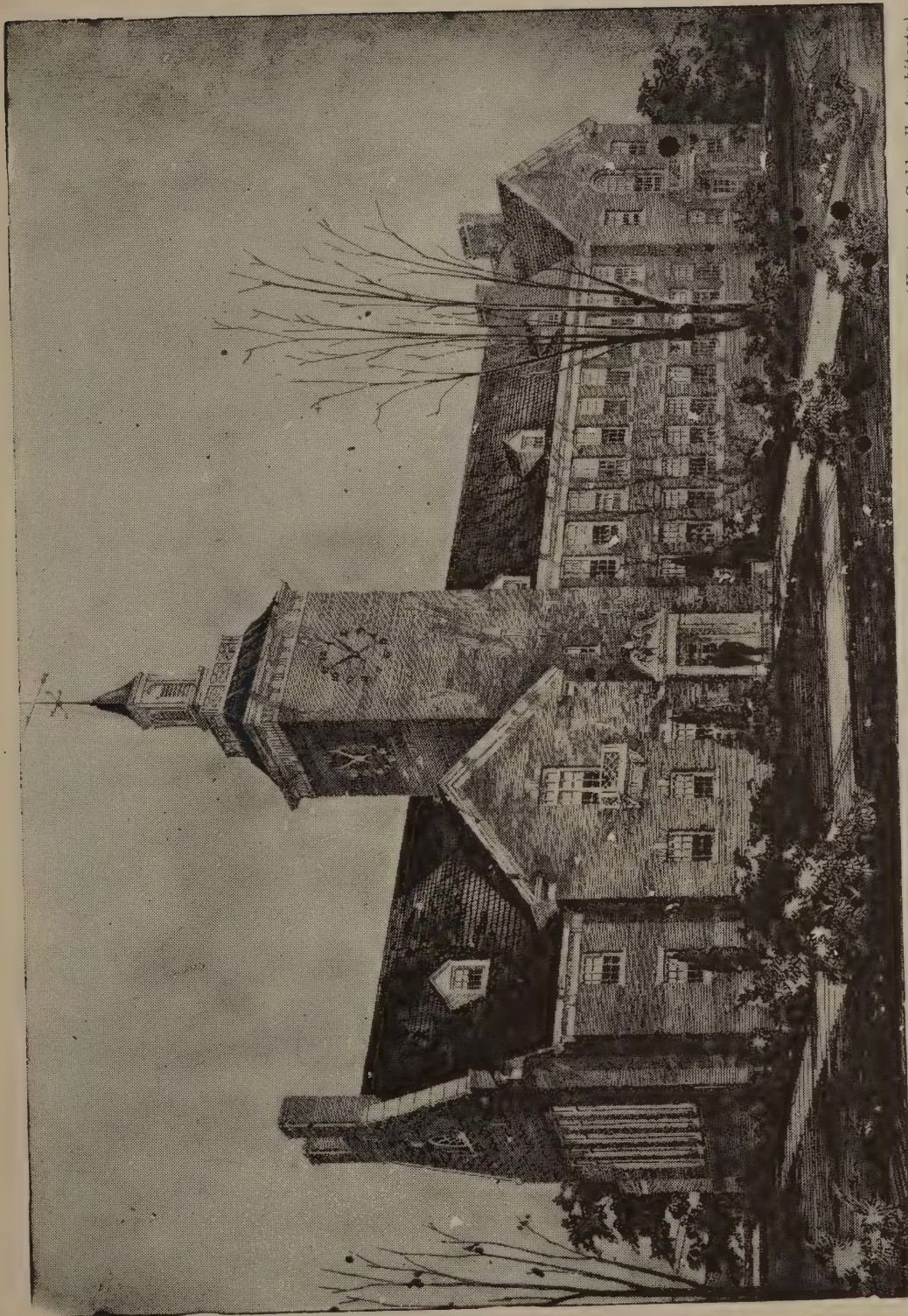
"Chronicle," 1840; "Commercial Advertiser," 1846; "Constitution," 1852; "True American," 1853; "Express," 1857; "Daily Bulletin," printed for a short time in the "Observer" office, 1861; a daily edition of the "Dispatch" (moved to Erie in 1856), 1861; "Unsere World," 1851; "Zuschauer," 1852; "Erie Presse," 1860; "Leuchthurm," 1870; "Republican," 1867; "Daily Bulletin," 1874; "Lake Shore Visitor," 1874; "Argus," 1875; "Advertiser," 1876; "Lake City Daily," 1878; "Journal de Noticias" (Portuguese), 1877; "Herald," 1878; "Graphic," 1880; "Star of Liberty," 1882; "Sonntagsgast," 1881; "Times," 1888; "Sunday Globe," 1891; "Arbeiter-Zeitung," 1891; "News," 1892; "Highland Light," 1892; "People," 1892; "Sunday Messenger," 1894; "Truth," 1895; "Morning Record," 1895; "Daily Journal," 1896. Besides these, B. F. H. Lynn, who founded the "Daily Dispatch," somewhere in the early seventies, published a very readable weekly called the "Western Pennsylvanian," which, however, was not a financial success and was merged in the "Gazette." Soon afterwards D. F. H. Ohr published a weekly for a short period, its name is not now recalled. Besides these, there was John M. Glazier's "Record" and the "Echo," a newspaper after its kind, and last of all the numerous progeny, the "Post." Reading over the list it would appear as though there was little left in the newspaper vocabulary for future newspaper projectors to select a name from.

John Elmer Reed, in his "History of Erie County" (1925) drew heavily upon the "History of Erie County," compiled in 1909. In the following stories of the Erie major journals, we follow the summary of Reed:

The old "Erie Gazette" is recalled by our older people with much affection. Mr. Sterrett was a man close to the people, and succeeded in making his paper a member of the families into which it entered. It was seventeen by twenty-one inches in size when first issued, and its place of publication was a small log building on the west side of French Street, the second lot north of Fifth Street. Some of the men who were associated with this paper from time to time were: James Buchanan (who did not act as President of the United States, although having the same inalienable right to the office as the man who did), J. Hoge Waugh, John Riddell, John Shaner (1835-42),

J. P. Cochran and George W. Riblet, 1842 to 1845, when Mr. Sterrett returned to it; and on September 10, 1846, I. B. Gara was induced to join him as its editor, continuing until May 3, 1865, when Samuel A. Davenport became its owner, publishing it until June 5, 1873, when he sold it to F. A. Crandall. While Mr. Davenport owned it he had, amongst other editors on it, Messrs. E. L. Clark, John R. Graham, R. Lyle White, James Hendricks, and B. F. McCarty. W. G. McKean purchased it from Mr. Crandall, February 1, 1882. It later became merged, and finally lost its identity in the "Dispatch." But while it lived its name was a household word throughout the county.

"The Erie Observer."—In 1829 considerable anti-Masonic feeling arose which was sponsored or led by the old "Gazette." The Masonic fraternity had no publication here with which to voice their sentiments. In consequence a number of the Masonic Order, including P. S. V. Hamot, Daniel Dobbins, Joshua Beers, Robert Cochran, Smith Jackson, Edwin J. Kelso and others, threw into a common enterprise and established a paper in opposition to the "Gazette." They named it "The Erie Weekly Observer." It first saw the light of day May 29, 1830, in the second story of a building which then stood upon the northwest corner of Fifth and French streets, but two doors from where the "Gazette" was born. Amongst its publishers and editors were: T. B. Barnum, followed by H. L. Harvey, in 1832; Thomas Laird in 1837; Hiram A. Beebe in the spring of 1839; J. M. Kuester and W. McKinstry in 1840. Shortly after the courts took a hand in running it by appointing E. D. Gunnison as its receiver, with William A. Galbraith acting for a time as its editor. Messrs. A. P. Durlin and B. F. Sloan secured this paper in May of 1843, who achieved very fair success with it until Mr. Durlin withdrew on January 26, 1856, M. M. Moore taking his place with Mr. Sloan. Mr. Moore continued until January 1, 1859, and Mr. Sloan disposed of the paper on January 1, 1861, to Andrew Hopkins, the brother of Hon. James H. Hopkins, then of Pittsburgh. On January 17, 1862, Messrs. Benjamin Whitman and James I. Brecht obtained it, who continued until April 1, 1865, when Mr. Brecht retired, leaving Mr. Whitman, who continued the paper until December 1, 1878, when Robert B. Brown came from the "Clarion Democrat" to become its owner. Mr. Brown started publishing it as a daily on October 15, 1881. It continued until F. S. Phelps became its publisher, and during a period of sixty-seven years it was the leading Democratic mouthpiece in this part of the State. When Mr. Phelps went to the



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"Times," a new paper in Erie, the old "Observer," with its daughter, the "Sunday Graphic," were suspended.

The "Dispatch," founded in 1851 at Waterford by Joseph S. M. Young, was removed to Erie in 1856 at the instance of the "Anti-Railroad" men of Erie, and was their clamorous mouthpiece during those strenuous days. Succeeding a fire which consumed the plant shortly after its establishment in Erie, funds were raised by its friends and supporters and a new outfit secured for Mr. Young, which was much superior to any of the equipment possessed by the other newspaper publishers in Erie. February 1, 1864, Mr. Young's foreman, B. F. H. Lynn, took over the plant, improved it, and on May 22, 1864, commenced the publication of a daily edition, which it is believed has been regularly published ever since. Mr. Lynn's management resulted in a sheriff's sale of the property after a few years, and some of the later publishers were: S. Todd Perley, Azro Groff, W. P. Atkinson; Willard, Redway & Cook, in 1869; Willard, Redway & Seaman, in 1872; Willard & Brewer, on January 1, 1874; Willard, Brewer & Hooker, in April, 1877; Mr. Willard retired his other partners, September 3, 1878, and in May, 1883, Messrs. Camp, Belknap and Johnson, of North East, were associated with him in its publication. Eventually it was acquired by Charles H. Strong, who placed it upon a most substantial basis as a real newspaper venture. It has lately become consolidated with the "Erie Herald," and the two papers have become the Erie "Dispatch-Herald." In November, 1924, Mr. Strong disposed of his interests in the combined papers to his business manager, John H. Strong, a western newspaper man, who became its owner and publisher. The "Dispatch" was originally independent, but since about 1860 it has been an ardent supporter of the principles of the Republican party.

The Erie "Herald" was established in 1878 by William L. Scott to voice the principles of the Democratic party, which at that time was practically without a local spokesman amongst the newspapers. For many years Nelson Baldwin guided the course of this paper true to the Democratic faith, and it became a well-known paper in this region. Later Mrs. Annie W. S. Strong became its owner and publisher, and when Mr. Baldwin retired from its wheel-house, he was succeeded by Samuel E. Holley, who had an able assistant in William D. Kinney. This paper lately was merged with the "Dispatch" and is now published with that paper as the Erie "Dispatch-Herald."

"The Erie Daily Times"—In 1888 nine union printers found themselves out of work because their unions had decreed a strike.

Not content to await the outcome of the strike, as most union printers were then doing, they looked about for something to do that would pay expenses until something better turned up. This resulted in their determination to start a new paper. They were all but out of funds, and it became necessary to do all of the work of collecting the news, editing and proofreading, as well as securing advertising patrons, themselves. They did manage in some way or other to secure sufficient type for their enterprise and finding a back room in a basement which they could finance, the business started and a new evening paper was launched. Some of the original members of the project soon became discouraged and left it, but John J. Mead and Jacob F. Liebel clung to it through all of its early troubles, and in 1890 new blood and enterprise were added when they secured Messrs. J. H. Kelley, John Miller and D. S. (Dock) Crawford. As fast as practicable new equipment was secured, new departments added, the job department was discarded, and the venture became a substantial business enterprise in the county. The members had then long ceased setting type themselves, and carting the forms to a small job office in their neighborhood. They secured linotype machines of the latest pattern, displaced their old presses with more modern ones, and today their new plant on West Tenth Street in the city of Erie is one of the most modern places for newspaper publication purposes to be found anywhere. In 1894 the "Sunday Graphic" and "Weekly Observer," which were then published by F. S. Phelps, were absorbed by the "Times," and Mr. Phelps became the managing editor. It has been Republican in principle, and vigorous in its news treatment. The Times Publishing Company, a corporation, is now one of the recognized business establishments of the city, and has one of the best equipped newspaper plants in the county. John S. Mead, Sr., the president of the company, is one of the veterans of journalism in this section.

As of fifteen years ago, there were published in Erie and Erie County, besides the above publications, several others, including the "Gazetta" (Italian); "National Zeitung" (German); "Tageblatt" (German); "Labor Press" (Socialist); "Christian Home" and "Lake Shore Visitor," all weeklies; "The Illustrated Erie Chronicle" and "Erie County Farm Bureau News" (monthly); and the "Erie County Law Journal" (weekly). In the county there were, in 1927, the "Cosmopolite-Herald," of Girard; "North East Breeze and Advertiser," a North East weekly; "North East Sun," "then the oldest paper in North East"; the "Edinboro Independent"; Water-

ford "Leader"; the "Albion News"; and the "Times-Enterprise," of Union City. The most of the county publications were still going strong in 1942. In the city of Erie, the field had been reduced chiefly to: 1. "Deutsche Zeitung," which traces its history back to 1854, and is now edited by Ernst Schnurpfell, also headed the company, Schnurpfell & Company, which prints it. 2. The "Trybuna Polska," of 1920, serves the Polish people of the city and county ably. It came out on Friday, had a large circulation, and was published by Barnard Weiner, and edited by Anthony Paliwoda. It apparently is a World War II casualty. 3. The "Times," daily, except Sunday, evening paper, of which John J. Mead, Jr., is worthy successor to his notable father, in the editing and management of this largely circulated medium. 4. The "Dispatch-Herald," daily, including a Sunday morning edition, which is edited by R. J. Virtue.

In Albion there is the "News," a Republican weekly, started in 1901, and which comes out on Thursday, Walter J. Conrath being editor and publisher. There is also the "Airport Journal," a monthly, dating from 1930, that is interested in aeronautics and philately. Walter J. Conrath is editor and the American Air Mail Society is its sponsor and publisher.

The "Corry Journal," evening except Sunday journal, is the vital and influential survivor of a number of newspapers in this second city of Erie County. It makes no claim to antiquity, although it was started in 1898. Among its predecessors were the "Petroleum Telegraph" (1863); the "Corry City News," of about the same period, both winding up their careers during the panic of 1873; the "Corry Telegraph" of somewhat later times, printed by Joseph Pain, initiator of previous papers, and who started the "Corry Leader" in 1885, the same year in which William C. Plumb launched the "Corry Flyer," but could be kept aloft but a short time. Then came the "Saturday Democrat" in 1890, another casualty, and in 1898 the "Corry Journal," now edited and published by W. P. Lombard.

The "Edinboro Independent" was originally a "Booster" journal for the State Normal College at that place. This town had several newspapers such as the "Native American," "The Gem," "The Museum" (1855), the "Express" (1859), the "Conneauttee Wave" (1893); and the "Edinboro Independent," founded in February, 1880, which to the present day serves the borough and surrounding section capably as a weekly, issued on Thursday under the editor, George S. Welker, and publishers, the Edinboro Publishing Company.

Of the "Girard Cosmopolite-Herald," and predecessors, several thousand words were written by John Kelley for the "Erie Daily News" early in 1933. In a fine set of articles he told of the "Free Press" and its founder, Stephen Decatur Carpenter, in 1845 the first newspaper in the county outside of Erie City. The "Express," its successor, in 1854 was transformed into the "Republican" with the slogan, "Independent on all subjects, rabid on None." He related also the stories of the "Union," the "Spectator," the "Crisis," the "Chromatic," the "News," the "Herald," and the "Cosmopolite."

The "Spectator" was the continuation of the "Union," which Dan Rice, the "circus man," bought to promote his candidacy for State Senator. In an issue of February 21, 1868, the "Conneautville Crisis" had at the head of its editorial, "For President of the United States, Colonel Dan Rice of Girard." At the National Democratic Convention, held in New York City, consistently throughout the twenty-two ballots required there was one for Dan Rice. It was cast by Major T. G. Fields, the owner of the "Crisis," the latter paper having been transferred to Girard at this period and merged with the "Spectator." The year of the establishment of the "Girard Cosmopolite" is given as 1866. Old time residents say that it was founded by Dan Rice, showman extraordinary. The "Erie Observer" of December 24, 1868, says: "Major Fields has transferred the 'Girard Cosmopolite' to Colonel Dan Rice, who is to be its publisher in the future with Charles Snow as editor." One more quote on this subject from George Kibler: ". . . . At the close of the campaign he (Dan Rice) merged the 'Spectator' with the 'Crisis' and gave the new publication the name of 'Cosmopolite.'" The name under which this paper has been published since December 1, 1910, the "Cosmopolite Herald," grew out of a consolidation of the "Cosmopolite" with the "Girard Herald," the latter having been started in 1905. W. L. Sherman purchased the "Girard Herald" on July 1, 1910, and has been sole owner of the consolidated papers since January 1, 1913. Mr. Sherman learned the printing trade in the old "Cosmopolite" office and is one of the most highly esteemed veteran editors and publishers in northwestern Pennsylvania.

Venango County—In Venango County the surviving newspapers in 1942 were the "News," of Emlenton; the "News-Herald" and the "Venango Citizen-Press," of Franklin; the "Blizzard" and the "Derrick" (daily and weekly) editions. The first paper in Emlenton was the "Allegheny Valley Echo," issued when its publisher felt like it.

Sold to R. F. Blair, in 1861, it came to an end in 1863, when its editor went to war. There followed the "Rising Sun," "Register," "News," "Telegraph," "Times," "Critic," "Herald," "Home News," and others. The present Emlenton "News," published weekly on Thursdays, does not trace its history back to the first "News" of the community, but to the "Home News," whose first copies bear the date May 14, 1885. Edited by E. H. Cubbison, it celebrated the completion of the first volume by a change of name to the "Emlenton News." Published as a semi-weekly until May, 1889, it has since been issued once a week. Stewart and Wilbert are its editors and publishers.

Franklin, county seat of Venango County, attracted many early printers. Across the pages of the history of its Fourth Estate are such names as the "Venango Herald," related in name only to a present newspaper of the city; the "Venango Democrat," which probably was born in March, 1823, and which was merged with the "Spectator" in 1849; the "Democratic Republican" (1829), to which was added the words "Anti-Masonic Examiner," that involves a shotgun editorial policy hard to understand now. In 1842 "The Democratic Arch" was launched. Then along came the "Venango Spectator," which succeeded the various earlier Democratic political sheets. The "Franklin Intelligencer" was inaugurated in 1834; the "Franklin Gazette" died as an infant; and the "Advocate and Journal," devoted to temperance and agriculture, found its subscribers too temperate in their payments. There also were the "Whig Banner," lasting six months; the "Independent Press," enduring nearly a decade before being absorbed; the "Franklin Herald," a Greenback party organ for a few months; the "Pencil and Shears," "Daily Citizen," "Morning Star," the "Penny Press," all of brief fame.

The modern "News-Herald," evening except Sunday paper, and the "Venango Citizen-Press," printed on Thursday, both published by the News-Herald Printing Company, and edited by James A. Murrin, are the inheritors of the traditions of not only four pioneer newspapers, but of several more. Taking the four names in order: the "Evening News" came out on February 18, 1878, as a small daily selling at one cent, and well worth it. It later was built up on the sound foundation of advertising with superior men in charge, from James B. Borland, at first, through James B. Muse, H. May Irwin to Edgar Stevenson and James A. Murrin. The "Venango Herald" dates from 1902, and David McCalmont initiated a period of fine editing and publishing, furthered by William P. Ferguson during his lifetime. Incidentally, James Murrin, from "somewhere in France,"

wrote enlightening articles about the First World War. The "American Citizen," founded in February, 1855, sponsored by Charles Pitt Ramsdell, was purchased four years later by William Burgwin, Floyd C. Ramsdell, and later by M. B. Smiley. It was renamed the "Venango Citizen," McDowell, Smiley & Reisinger became owners, and in 1884 the "Independent Press" was taken in, and a new name appeared and remained in the journalistic world—the "Citizen-Press."

The Venango County press has changed often through the years; the rise and fall of politics and of petroleum production being the main factors. Of former days were the "Seneca Kicker," which functioned from 1899 to comparatively recent times; the "Daily Record," of Pithole, the first successful daily in Venango County (1865), which wound up its career in Petroleum Center, during an oil boom period; the "Reno Times" (1865-66); the Pleasantville "Evening News" (1869), and the daily "Gas Light," both of which soon flickered out; and the "Commercial Record" of Reno, semi-monthly, born February 1, 1887. Rouseville had the "Evening Bulletin" (October, 1870-December 24, 1871), and the "Pennsylvanian" (August 10, 1872), that was excellent the few years it lasted. Also there was the Cooperstown "News" (1879-80).

Oil City, whose name is directly derived from what was its chief interest, has a history in newspaperdom that is distinctive and worthy of extensive treatment. One cannot write of the petroleum developments without basing a great deal of information upon the "Oil City Derrick," the first American publication to win recognition the world over as the organ of the oil industry. This was not the first newspaper in Oil City, for among the pioneer publications were the "Weekly Register" (January 14, 1862), the "Monitor," "Sand Pump," "Bulletin," "Petroleum Monthly," the "Evening Register," "Venango Republican," "Petrolian," the "Register," and "Republican," later becoming the "Times," which soon discontinued its daily issue.

The following history of the Derrick Publishing Company has been officially supplied:

"Known for three generations as 'the organ of oil,' 'The Oil City Derrick,' which appears as both a daily and a weekly newspaper, dates back to 1871, the year of the incorporation of Oil City itself. The history of the paper has been a romantic, at times an exciting, one; and its files reveal to the

studious reader what is said to be the most complete and consistent history now extant concerning this great American industry. In the files of this paper Ida M. Tarbell found much of the material that went into her history of the Standard Oil Company. And from time to time important lawsuits have been decided by testimony from the pages of 'The Derrick.'

"'The Derrick' was founded by C. E. Bishop, W. H. Longwell and H. H. Herpst twelve years ago after the drilling of his historic Drake Well. Mr. Bishop served as editor until succeeded at his retirement, in 1873, by Frank H. Taylor, who in turn was succeeded, in 1877, by R. W. Criswell. Mr. Longwell was the first business manager of the paper. The original quarters of 'The Derrick' were in Seneca Street. Later the paper's proprietors erected the first two floors of the building in Center Street, largely because this site was close to the Oil Exchange. In those days all the petroleum refined was produced in this part of Pennsylvania. Oil City was the oil capital of the world and its Oil Exchange set world prices. From an early period the editors of 'The Derrick' saw the need for good statistical services, and accordingly employed expert statisticians and reporters, among whom were Homer McClintock, William Steiger, Henry Gauss, A. L. Snell, Archibald Crum and Joseph W. Orr. One of these experts, John J. McLaurin, of Franklin, wrote 'Sketches in Crude Oil,' a rare book that is now a prized possession in many a library. At the retirement of W. H. Longwell as business manager, in 1882, The Derrick Publishing Company was formed. Edward Stuck, then editor, was succeeded in December of that year by William H. Siviter, as editor and manager. On August 11, 1885, the late P. C. Boyle bought the paper and made it 'the organ of oil.' He was associated with the Rockefellers, Daniel O'Day, H. H. Rogers and John D. Archbold, all of them famous in the Standard Oil Company organization; and he became one of the most brilliant and forceful publishers in the United States. 'The Derrick' became an essential publication wherever oil was produced or refined. P. C. Boyle, born in Donegal, Ireland, July 22, 1846, was a young child when brought to western Pennsylvania by his parents. He enlisted in the 54th Pennsylvania Volunteers for Civil War service before attaining his majority, and after the war

engaged in several branches of the oil industry, notably as an 'oil scout,' whose function was to gather information on new wells for its effect on the oil market.

"Using 'The Derrick' as a nucleus, Mr. Boyle became publisher also of the 'Bradford Era,' the 'Toledo Commercial' and a newspaper in Bolivar, New York. When the industry was extended to the mid-continent field, he established the widely known 'Oil and Gas Journal,' published in its own fine plant in Tulsa, Oklahoma. He sent correspondents to all oil fields then in existence, and brought 'The Derrick' to such a stage of modernism that it was the first newspaper west of the Alleghenies to install linotype machines to replace the old-time hand-set method of typesetting. In other ways he introduced up-to-date methods from time to time, and it was through him that 'The Derrick' became a charter member of the Associated Press. It is today also a member of the American Newspaper Publishers' Association, the Bureau of Advertising, the Pennsylvania Newspaper Publishers' Association and the Audit Bureau of Circulations. Under P. C. Boyle's management, Charles H. Harrison succeeded R. W. Criswell as editor in 1889, when Mr. Criswell joined the 'New York World' staff. In August of the same year Mr. Harrison was succeeded by Robert Simpson, who later became managing editor of the 'Pittsburgh Commercial Gazette.' Subsequently P. C. Boyle himself became editor, so serving until his health failed in 1919, when Frank Taylor, who had resumed his work with 'The Derrick' as oil statistician in 1911, became editor. P. C. Boyle's work made 'The Derrick,' without doubt, an important factor in the oil industry's most turbulent days.

"'The Derrick' is a conservative newspaper, holding that, if capital is to grow and the country to prosper, business and finance should not be subjected to political punishment, unjust and excessive taxation and governmental regimentation. It has been a consistent supporter of the Republican party and has won State-wide distinction for making Venango the strongest Republican county west of the Susquehanna in this State. 'The Derrick' has always promoted sound policies in Oil City.

"The printing plant run in connection with the paper is an employer of more than thirty people, specializing in all

kinds of form work, color printing, loose-leaf systems, ruling, railroad time-tables and telephone books. Many thousand dollars' worth of business is brought each year to Oil City through this printing establishment—money that is spent chiefly in the city's stores and shops. Through the thirties of the present century, under the guidance of E. R. Boyle, son of the founder, and later under E. P. Boyle, grandson, 'The Derrick' forged ahead, expanding its circulation and influence so as to cover the entire suburban area around Oil City. Its forceful editorials have made its opinions respected throughout the State and the Nation, and its paid circulation has mounted to more than twelve thousand. The paper goes into ninety-eight per cent. of Oil City's homes, and in Venango, Clarion and Forest counties has a greater paid coverage than all other newspapers combined. In October of 1941 The Derrick Publishing Company purchased the stock and assets of Oil City Blizzard, Inc., and began publication of 'The Blizzard' in the evening field along with 'The Derrick' in the morning field. 'The Blizzard' was founded in 1882 and has been published steadily ever since.

"The Derrick Publishing Company now employs upward of 130 persons with a payroll approximating \$225,000 a year. It is one of the city's steadiest and most substantial industries.

"Oil City folk are justly proud of this great newspaper enterprise, enjoying, as it does, the honor and prestige of threescore and ten years of success and leadership.

"E. R. Boyle, who died in August, 1938, continued his father's wise policies, devoting himself to the management of 'The Derrick' throughout his active career and serving as president of the publishing company until his passing. He became a familiar figure among Pennsylvania publishers, and was an active and unceasing influence for good in his home community. Following his death he was succeeded by his son, E. P. Boyle, the present president of the company, who represents the third generation of the Boyle family to continue the historic newspaper. John O'Donnell has been editor, treasurer, general manager and director since January, 1929. His extensive newspaper experience with the Pittsburgh 'Dispatch' in the nineties, as managing editor, brought him to a high place in the profession. In Oil City, Mr. O'Donnell has interested himself extensively in the economic and social affairs of the

people. He is a trustee of the Polk State School and a member of the boards of the Salvation Army and Oil City General Hospital. He is a Rotarian; a director of the Petroleum Publishing Company, and a member of the Elks and the Knights of Columbus.

"E. P. Boyle, the publishing company head, has been with the company since September. He served an apprenticeship in different departments, was given executive and managerial responsibilities, then became president at his father's death. He is an Elk; a member of the Rotary Club, the Wanango Country Club, the Fraternal Order of Eagles and the Knights of Columbus; and is chairman of the Venango County Board of Assistance; a trustee of the Young Women's Christian Association, a director of the Venango County Crippled Children's Society, a director of the Oil City Trust Company, a member of the Pennsylvania Society, and vice-president and a director of the Petroleum Publishing Company, publishers of the 'Oil and Gas Journal.'"

Mercer County—The second most populous county in northwestern Pennsylvania, Mercer, has comparatively few newspapers despite its fourteen boroughs and two cities. Its journalistic history is unusually checkered possibly because of its location on the Ohio State line and position halfway between Pittsburgh and Erie. The first of the many printing enterprises in the county was the "Western Press" of Mercer, whose first copy was dated February 21, 1811, Jacob Herington, editor and publisher. The first competitor was the "Mercer County Gazette," which united with the older paper in 1827, as the "Western Press and Mercer County Gazette." Along in Civil War times came the Democratic rival, "The Register," that failed to win popularity.

Sufficient general newspaper history, in the county seat at least, is contained in the story of the development of the "Dispatch and Republican." What is rightly known as the "oldest continuous business in Mercer is the publication of this paper." This is not based on the idea, sometimes stated by historians, that this journal is a successor of the "Mercer Luminary," founded in 1830, and which ended its career July 3, 1850. Although not a direct descendant of this pioneer journal, it has been written, ". . . by a descent not wholly apostolic, but quite as reliable, the 'Luminary' of 1830 is represented in this vigorous advocate of the principles of the G.O.P. in 1888." Of the "Republican" later.

With becoming modesty the present-day "Mercer Dispatch and Republican" claims *only* ninety-eight years of public service. It is even more modest in its own tale of its life as contained in an editorial of March 14, 1941, entitled:

"WE ARE NEARING A CENTURY OF CONTINUOUS SERVICE
"Vol. 54, No. 1 Vol. 98, Old Series.

"With this issue the 'Mercer Dispatch and Republican' will enter the 98th year of continuous service to the county seat, to the Mercer community, to the county courts and to the Republican party and its predecessor, the Whig party.

"In 1844, just ten years after the fusion into the Whig party of national Republicans and others opposed to the Democrats, a group of prominent Mercer County Whigs decided to have their own organ, bought equipment in Pittsburgh, brought it by river and canal to Big Bend and by ox cart to the county seat. They also brought an editor, John D. Butler, from Pittsburgh and established here a weekly newspaper known as the 'Mercer County Whig.' It is interesting to note that in 1850 the 'Mercer County Whig' moved to a building two doors back, on North Pitts Street, of the farmers and Drovers Hotel, a location believed to be next door to the present building.

"In 1864, with the Whig party badly disrupted over the slavery issue, this paper consolidated with the 'Mercer Dispatch' under the combined name of the 'Mercer Whig and Dispatch' and under the editorship and ownership of the late Samuel H. Miller, afterwards president judge of Mercer County and congressman for the then 28th district. The 'Dispatch' had been established in 1857 with the birth of the Republican party which it supported. Shortly after the consolidation, Mr. Miller dropped the combined name and published under the former title of 'The Mercer Dispatch.'

"Another consolidation was made in 1887 after the 'Dispatch' had been burned out in a disastrous fire. The plant of a rival, 'The Mercer Republican,' was purchased and the two papers combined into the 'Mercer Dispatch and Republican,' under which designation the newspaper has continued until today."

Several interesting footnotes could be made to this brief account, notably, that the above paper has been operated by the Barton family

for sixty-eight years: D. L. Barton, father, deceased; Dunham Barton, son, retired; Jeanette B. Barton (Mrs. Dunham Barton), who in 1942 was editor and publisher. At this writing, summer of 1942, the "Mercer Dispatch and Republican" is for sale. When this is consummated it probably will bring to an end the distinguished journalistic activities of one of the several notable families in northwestern Pennsylvania's "Fourth Estate."

Sharon is more than eleven times the size of the Mercer county seat, and is represented in modern newspaperdom by the "Herald,"



(Courtesy of the Mercer County Dispatch and Republican)

Home of the Mercer Dispatch and Republican, Established as Mercer County Whig in 1844, Only Survivor of Many County Seat Publications

a daily except Sunday evening paper, with a circulation much larger than any other journal outside of the city of Erie. The "Sharon Herald" celebrated its seventy-eighth birthday in 1942, for it was born April 11, 1864, fathered by the Frey brothers, who used an old "Washington" press to get out the paper on this date. The Rev. John Winter and Calvin W. Fay were also partners in the enterprise, prior to January, 1869, when John L. Morrison purchased a large interest. His is the big name in the early history of the paper, because for more than thirty years he was the man whose practical ability and courage made the "Herald" most influential in the county. In October, 1907, he sold his holdings to the Sharon Herald Publishing Company, of which Joseph Bucholz was president, William S. Organ vice-president, and W. B. Ramsey. There have been many changes in personnel and character of the paper, of which W. L. Aiken is the present editor.

One of other noteworthy Sharon publications was the "Eagle" founded in May, 1875, as the "Mercer County Eagle," which in 1875 began the issue of the "Evening Eagle," the first daily in the town,

and for a number of years the only daily in the county. The first Democratic paper was the "Times," the original number of which was dated June, 1868. It was finally absorbed by the "Eagle," and in turn became one of the bases of the "Evening Herald."

Greenville, a borough of less than ten thousand population, had been the headquarters of a number of papers, the most of which now make up that composite publication, the "Record-Argus," which carries on its mast-head the date 1848. This may be written without any disparagement of the "Greenville Progress," founded on June 1, 1877, by William J. Orr, Jr. In the beginning it was a daily paper, the only one in Greenville, although it also issued a weekly edition from July of that same year. It was, and is, a staunch Democratic organ, printed on Fridays, and has for its editor A. L. Johnson. Its influence and circulation have grown especially during the past decade.

Publications of the past in Greenville, other than collegiate or literary, were the "West Greenville Gazette," got out by an Irishman, Richard Hill, who in 1830 brought a crude hand press to the village. It survived three difficult years. Hill not so many years later published "The Visitor," which also proved unsuccessful. There was the "Weekly Express" (1848), later just the "Express," the "Independent Express" and the "West Greenville Times." Other publications were: The "Rural Argus," which became the "Venango Valley Argus"; the "Greenville Advance" (1871), which was the "Advance-Argus" from 1877 down to the present century; the "Evening Record," a daily edition of the "Advance-Argus," started in 1897; the "Union Democrat" (May, 1861), and sold to the "Argus" in 1864; the "Shenango Valley News" (April 11, 1882).

What became of most of these is well told in the following brief story of the "Record-Argus" as related by its present editor, John L. Morrison. He writes:

"THE RECORD-ARGUS"

"The history of 'The Record-Argus' dates from the 'Weekly Express' started in 1848 by J. W. Mason. In 1852 the name was changed to 'The Independent Express,' espousing anti-slavery, with Rev. William Orvis, editor. That same year it passed into the hands of William Laird. In 1853 the publisher was James C. Brown, and in 1854 it was published by James C. Brown and Jacob Weir. Later, in 1854, the paper was acquired by William S. Finch and J. L. Weir with James C. Brown as editor.

"The name was changed in 1856 to the 'West Greenville Times,' John S. Farman, publisher. That same year the paper was published by Farman and (A. M.) Campbell. The publishers in 1857 were H. A. Bowman and A. M. Campbell. Allen Turner bought the paper in 1859, making Mrs. Orpha Hammond editor. She was succeeded later by W. F. Chalfant. In 1861 the paper was again acquired by James C. Brown.

"In 1862 the name was changed to the 'Rural Argus,' W. F. Chalfant editor and publisher, and he was succeeded by F. A. Braggins. Five years later, W. H. H. DuMars became associated with Braggins, but the following year Braggins was again editor and publisher. Jacob Miller, a school teacher, conducted the paper for a part of the year 1869, and then W. F. Chalfant again took over.

"Harry Watson acquired the newspaper in 1871 and changed the title to 'Shenango Valley Argus,' selling it to George Morgan in 1875, Morgan, in turn, disposing of it to James C. Brown. That year it was consolidated with the 'Advance,' founded in 1871 by W. F. Harpst, Amos Yeakel and W. H. H. DuMars. The name of the consolidated paper was 'The Advance Argus.'

"The next year, 1878, 'The Advance Argus' was purchased by Leech & Beachler, J. C. Brown being made editor. In 1880 Brown bought out Leech and the publishers for the next five years were Brown and Beachler. In 1885 Rev. L. Hippee bought Beachler's interest, the firm being known as Brown & Hippee. They continued as publishers until 1890, when Levi Morrison bought the Hippee interest. In 1896 Morrison became sole owner, and in 1897 the 'Advance Argus' started its daily edition known as the 'Evening Record.'

"In December, 1917, on the death of L. Morrison, John L. Morrison became sole owner of the two newspapers. In 1924 the 'Advance Argus' and the 'Evening Record' were consolidated under the name of the 'Record-Argus.' This consolidation also included the 'Jamestown Argus-World' and the 'Stoneboro Citizen,' owned by the Advance Argus Company. (The 'Shenango Valley News' had been merged with the 'Advance Argus' a few years before.)"

In Grove City, Mercer County, the "Reporter-Herald" is going strong after sixty-three years. It was started in Karns City, in 1879,

as "The Telephone." This was an oil town whose glory quickly departed and the press was brought to Pine Grove (now Grove City), in July, 1882. Dr. J. Borland, A. C. Ray, A. A. Little, M. W. Moore and C. F. Lawrence were names associated with its history to 1894. The Lawrences, father, C. F., and son, Harry W., bought a whole new outfit in 1896 and changed the name to "The Reporter." The "Herald" was a competitor of much later date that was absorbed by the older publication. The "Reporter-Herald" comes out on Tuesdays and Fridays from the presses of the Grove City Publishing Company, under the editorial direction of J. C. McClymonds.

Clearfield County—Clearfield County has good press records, especially in more recent years. Of the ten papers published in 1925 (seven weeklies and three dailies), one, a weekly, had completely passed out, fifteen years later. Two had merged their journals, and one has taken a more appropriate name. The first paper in the county was brought out in 1827, and during the following century there appeared on the scene such publications as "The Clearfield Democrat," "The Clearfield Whig," the "Clearfield Citizen," later changed to "Clearfield Democrat," "Multum in Parvo," "The Public Spirit," "Clearfield County Times," afterward changed to the "Curwensville Herald," "The County Review," "The Osceola Reveille," "The Houtzdale Squib," "The Houtzdale Observer," "The Houtzdale Mining Record," "The Enterprise," "The Clearfield Monitor," and a few others.

The first newspaper in the county was the "Pennsylvania Banner," inaugurated in 1827 by George S. Irvin and Christopher Kratzer. It is reputed to have been printed on a press of Mr. Kratzer's own construction and invention. The "Republican" of Clearfield, printed under this title for a long period, was the legitimate successor to the old "Pennsylvania Banner," although there were many changes in title down the years, even to the last three or four years, when it became "The Times," a Democratic weekly published on Fridays, with the long experienced Ralph T. Smith as its editor, who more recently was succeeded by H. J. Ganoe as publisher.

The "Progress," Clearfield's evening, except Sunday, journal, is not only what its name implies, but was born amidst the strife in the Republican party when the "Progressives" or "Bull Moosers" came to the fore. Founded in 1912, by a few business men lacking newspaper experience or sufficient capital, the "Progress" bravely competed with other older and stronger journals and advocated cour-

ageously the election of "Teddy" Roosevelt. Harry A. Reed was the earliest editor, but when, in 1917, Robert H. Summerville, veteran president of the Progressive Publishing Company, secured control, he put in charge as his managing editor G. Albert Stewart, who served in this capacity for more than twenty-five years before he became Secretary of Forests and Waters in the Cabinet of Governor Arthur H. James. The "Progress" has pioneered many innovations in local journalism. Its editor in 1942 was W. J. Thomas.

Another Clearfield borough paper is the well-known "Raftsmen's Journal," published since 1854, the heyday of the lumber business in this part of northwestern Pennsylvania. It was edited by Mary Love Vosburgh, and published on Fridays by the Raftman's Publishing Company. In recent years Dick Reed became editor.

Curwensville has "The Herald," founded in 1903, which has an unusually large circulation. It is edited and published on Thursdays by J. V. Lewis. The "Citizen-Standard," of Houtzdale, a Republican paper issued on Thursday, by Dick Reed, editor and publisher, has a history that goes back to 1879. The "Osceola Leader" is edited by Esther J. Johnson.

DuBois, the metropolis of Clearfield County, has the "Courier" and the "Express," the first a morning paper, the latter coming out in the evening, with no Sunday editions. The two are published by the Gray Printing Company. W. B. Ross is editor of the "Courier" and J. S. Gray of the "Express."

Clarion County—As of the year 1942, the newspapers of Clarion County were the "Democrat" and the "Republican," both founded in 1840 in the county seat; the "Leader-Vindicator" (1885) of New Bethlehem; the "Record" (1924) of Rimersburg; the "Review" of East Brady and the "Times" of Knox. The former "Knox Herald" had been absorbed by the "Clarion Republican," April 20, 1939.

The year 1840 stands out in the history of Clarion County. Since that year Clarion, then named as the county seat, sprang from almost nothing to become the most populous borough; Knox and possibly other communities were started, and there are now two newspapers in Clarion that celebrated their centennials in 1940. One of these was the "Clarion Democrat," which traces its history to the "Clarion Republican," founded in 1840, the first publication in Clarion County. It has been described as a "Democratic newspaper from the time of its establishment; it supported candidates of the Democratic party, and opposed those of the Whig party." It so happens that in Sep-

tember of 1842, the "Iron County Democrat" was started as an organ of certain factions in the Democratic party in opposition to the "Clarion Republican," and after two years of rivalry was purchased by the "Republican," which since February, 1844, has been the "Clarion Democrat."

Thus much on the question of the political nomenclature of today goes back only to shortly prior to the Civil War. Some interesting coincidences occurring in the history of newspapers in Clarion County are: First, a Democratic journal started under the name of "Republican"; second, three men have been identified prominently with Clarion journalism, all of the same name, Will T. Alexander, yet only two of whom were related; third, in 1940 both the "Democrat" and the "Republican" of Clarion, were published or edited by women, Minerva M. Sansom, and the widow and daughter of the late Norman C. Ball.

It should again be pointed out that "oil booms" have affected journalism in Clarion County just as they did all lines of business. Mushroom towns rose and fell with rapidity, and so did everything connected with them. During the long past, there were newspapers of short and long existence in the county, such as: "The Clarion Republican," "The Clarion Democrat," "The Iron County Democrat," "Clarion Banner," "Clarion Register," "Clarion Independent Democrat," "Democratic Register," "Clarion Jacksonian," "Independent Banner," "Clarion Independent Banner," "Cogley Sunday News," "The Callensburg Visitor," "East Brady Independent," "East Brady Index," "East Brady Review," "East Brady Spirit," "Edenburg Daily Herald," "Edenburg Weekly Herald," "Edenburg Spirit," "Edenburg Observer," "Knox Herald," "Foxburg Gazette," "Foxburg-St. Petersburg Leader Press," with this caption on the mast-head, "The Biggest Little Newspaper in the State," "St. Petersburg Progress," "New Bethlehem Press," "New Bethlehem Leader," "New Bethlehem Vindicator," "New Bethlehem Leader-Vindicator," "Rimersburg Record." After a century only five remained.

"The Clarion Republican," predecessor of all the newspapers in the county, was first published at Strattanville, because this hamlet was expected to be the county seat, but later in that year, 1840, was brought to Clarion, hand-press, type, bag and baggage, with Colonel Will T. Alexander and Captain Barber in command, who were joined by B. J. Reid of the "Iron County Democrat." "It was printed in an uncompleted storeroom with an old oak tree for a roof." It soon had a formidable rival, imported from Butler, "The Visitor,"

sponsored by another faction of the pseudo-Democratic party. The next in line of chronology was the "Iron County Banner."

The compiler of this chapter is not going to enter into the controversial by continuing the further history of the "Clarion Democrat." Two full accounts of its development were written by William J. Sansom, for nearly half a century publisher of the "Democrat," whose death on April 21, 1937, brought to a close one of the longest and most valuable careers in the annals of Pennsylvania journalism, and ended his forty-seven years' ownership of the paper which he, more than any other of its several publishers, promoted to its present leadership among county publications. His story of the "Democrat" was first published in 1917 and repeated with additional material in a centennial edition in 1940. As already indicated, Minerva M. Sansom and Walter L. Smith are the editors of this weekly journal, which is as strongly Democratic as ever in its 102 years, and claims the largest circulation in Clarion County. The estate of W. L. Sansom is the publisher.

In the "One Hundredth Anniversary Edition of the Clarion Republican," issued on August 22, 1940, among the letters of congratulations, awards and comments, is one from The American Press Century Club, certifying that the "'Republican,' founded in 1840, at Clarion, Pennsylvania, having furnished satisfactory evidence of continuous publication for more than one hundred years, has been enrolled as a member of The American Press Century Club." The above was signed and dated May 15, 1940.

Culling some few items from "A Historical Sketch of the Clarion Republican" (1940):

Through research it has been learned that these first publishers of "The Clarion Republican" were quite independent in their political beliefs although they had a strong leaning toward the Whig party. About the time the Republican party was organized, J. H. Patrick acquired the R. Barber interest in the paper. At that time the "Republican" became very definitely an organ of the Republican party. For some time Alexander was associated with Patrick as editorial writer.

By 1873 the paper was published by J. H. Patrick & Company, of which the younger Will T. Alexander, grandfather of Wilbur Alexander, acted as business manager. The "Republican" was published by this company until 1876, when the Republican Printing Company acquired it. Will T. Alexander remained as business manager, and W. R. Jones became editor.

A. A. Carlisle was next employed as editor. A few years later he purchased the "Clarion Jacksonian," which he edited until he was forced to retire on account of ill health.

About 1883 John B. Patrick purchased the Republican Printing Company, as well as the "Foxburg Gazette" and the "East Brady Independent," published by the able Samuel Young, who had previously published the "Independent Banner" in Clarion. Patrick merged all these publications, and it was called the "Clarion Republican-Gazette." The well-known John Doyle was associated with Patrick for six years.

W. C. Miltenberger and William H. Pickens acquired Doyle's entire interest and a part of Patrick's interest in 1896.

In 1901, Jay Fitzgerald purchased the "Clarion Republican-Gazette" from Miltenberger. "The Clarion Jacksonian," which was organized in 1872 and edited successively by Messrs. West, Carlisle, Shick, and Whitehill, was merged with the "Republican" in 1901. George R. Whitehill then became co-publisher of the "Clarion Republican."

In 1903, Fitzgerald sold his interest in the publication to Whitehill. On May 3, 1903, Mr. Whitehill formed the corporation which was known as the Clarion Printing & Publishing Company. He conducted the business and acted as editor until 1906.

The next editor was Samuel L. Pickens. In 1906 he purchased Whitehill's interest in the Clarion Printing & Publishing Company and for seven years edited the "Clarion Republican." In the fall of 1913 Mr. Pickens sold his interest in the company to Norman C. Ball, a veteran newspaperman, of Pittsburgh, Pennsylvania. Mr. Ball soon purchased the outstanding stock.

Several years later Mr. Ball acquired the B. J. Reid property, and after building a modern structure suitable for the newspaper business, he moved his plant to its present location.

In 1925, the Clarion Printing & Publishing Company purchased the "Knox Herald" from Samuel Pickens, who had established it in 1915. Mr. Ball continued to publish the "Clarion Republican" and the "Knox Herald" until his death in January of 1932.

After Mr. Ball's death the ownership of the Clarion Printing & Publishing Company fell to his widow, Mrs. Clara Latshaw Ball. With the assistance of her daughters, she continued to publish the "Clarion Republican" and the "Knox Herald." The latter was absorbed by the former on April 30, 1939.

Following the death of Mr. Ball, John P. Baker served as managing editor for several years, and Carl L. Bierly, a newspaperman, of Brookville, was managing editor for sixteen months in 1936-37. From 1932 to 1938, Catherine Ball Baker, a daughter, was secretary-treasurer of the corporation, and when ill health caused her resignation, a sister, Ruth Ball Davis, was elected to fill the vacancy.

Many brilliant journalists have been editors of the "Republican"—Will T. Alexander, John B. Patrick, W. H. and Samuel Pickens, Jay E. Fitzgerald, G. R. Whitehill, Norman C. Ball, and those of more recent date. The least that can be said is that for a century Clarion, county seat and the county, have been served well by their weekly newspapers, the "Republican" and the "Democrat."

Norman C. Ball was especially widely known for his editorials, human and humanitarian characteristics, and his versatility with the pen. One much-quoted poem of his which may appropriately be reprinted is:

THE OLD HOME PAPER

It's printed old-fashioned and homely,
Bearing name of a small country town;
With an unfeigned sneer at its wrapper,
The postman, in scorn, throws it down.
But I scan every line that it offers,
Thru the vista of years, thru youth's pleasures and fears,
It serves their keen touch to renew.
The death of a girl I once courted,
The growth of the firm I once jeered,
The rise of a friend I love to commend,
The fall of a man I revered.
As I dream I drift dreamily backward
To the days when to live was a joy,
I think and I pore, till the city's dull roar
Grows faint, and again I'm a boy.
Rare perfume of green country by-ways,
Fair music of mowers and bees,
And the quaint little town with the streets leading down
To the creek and the low-bending trees.
Around me the forms of my comrades,
About us earth's glories unfurled,
Each heart undefiled, with the faith of a child,
Looking forth to a place in the world.
And the paper tells how all have prospered,
I follow their lives as they flow,
Applauding each gain and regretting each pain
For the sake of the days long ago.

Above all the huge city dailies
With ponderous utterance wise,
This scant page hath power to spread for an hour
A fairyland sweet to my eyes!

The "Record" is the successor or survivor of some noteworthy newspapers in the history of Rimersburg. The first was a publication in pamphlet form, the "Courier," printed by Wilberforce Deatrick, who was head of the Clarion Collegiate Institute. There followed the "Rimersburg Gazette," that lasted only a few years, although sold to W. E. Downes, of New York. W. E. Himes, then publisher of the "New Bethlehem Times," started the "Rimersburg Times" in his New Bethlehem plant, but soon gave up the idea of printing two papers, weekly. In 1924, Rimersburg was without a newspaper, and a citizen's committee persuaded I. E. Aucker, of Oil City, to start one. Thus was founded the "Rimersburg Record." In 1929 it was purchased by Ross B. Atchison, under whose direction the paper has been built up to its present wide influence and large circulation. It is independent Republican in politics, and appears on Fridays.

Little has been recorded of the press in the New Bethlehem of the past, although there must have been several ventures prior to 1885 and the birth of the "Leader-Vindicator." There have been the "New Bethlehem Press," "New Bethlehem Vindicator," and the "New Bethlehem Leader," whose names indicate the source of the present newspaper. The New Bethlehem "Leader-Vindicator," independent politically, is issued on Wednesday under the direction of the experienced L. O. Hepler, editor and publisher.

The fate of the "Knox Herald" has been mentioned. The town was formerly Edensburg, and its first paper was the "Edensburg Daily Herald," introduced to the public by J. M. Gifford, in 1876. Everything in the line of bad luck happened to it, including fires. From 1877 on there entered the publishing field the "Edensburg Oil Times" (1877); the "Edensburg Evening News" (1879), which soon became a morning paper, named the "Edensburg Spirit." The next was "The Gatling Gun" that fired just one edition. Others of later years were: "The Clarion County Observer," "The Laborers Friend," and the recent "Knox Times." The assets of the "Herald" were absorbed by the "Clarion Republican" on April 30, 1939.

McKean County—For some reason the historians of McKean County have been but mildly interested in saying much about its press. Even the newspapers make very little of their annals. To

illustrate: On April 9, 1942, the "McKean County Democrat" of Smethport, circulated a large and exceptionally informative courthouse edition, celebrating the recent completion of the county's "capitol." Much space was devoted to histories of the city of Bradford, Kane and others of the six boroughs, but less than a half page of type was allotted to the story of Smethport, which was concluded with the paragraph: "'The McKean County Democrat' was established at Smethport in 1875 by Clark Wilson, one of the oldest newspapermen in the State." Turning to the top of the editorial page, one discovered that on April 9, 1942, Henry A. Satterwhite was editor and publisher.

There was also in this edition the brief notice that "The pioneer newspaper of McKean County was the 'Forester and Smethport Register,' published by Hiram Payne." Vol. II, No. 19, bears the date June 14, 1834. The "McKean County Journal" was issued by Richard Chadwick, in 1834, and sold by him to Asa H. Cory, in 1837. The "Beacon and McKean County Journal" went to press in September, 1837. It bears the name of Asa Howe Cory as publisher. The "Beacon" was sold to Mr. Oviatt, who changed its name to the "Settler and Pennon." A little later we find the "Tomahawk and Scalping Knife."

Kane, the largest borough in the county, in 1938 was served by the "Kane Republican," an evening, except Sunday, journal, edited and published by G. Scott Smith. At that same time the "Echo" was the newspaper of Mount Jewett, a Thursday weekly, edited and published by H. K. Lundberg. The "Eldred Eagle" of Eldred was started on August 24, 1878, by the late A. D. Gould. Following his death on July 2, 1907, the journal was purchased by B. G. McFall in 1908, who continued with the publication until 1923, when he sold it to a Mr. Moorhouse, who conducted it for a short time, before Mr. McFall took it over once more and was associated with the paper until 1924. In that year the "Eagle" was disposed of to McDonald & Randall, who in 1929 sold their interests to O. A. & E. L. Kahsnitz. In August, 1938, B. L. Eldridge became the publisher with Mrs. Mae Russell as editor, an arrangement which is being continued at the present writing, summer of 1942. The "Eldred Eagle" is a Friday weekly paper, independent in politics, that is held in high esteem.

Bradford long has been the dominant municipality in McKean County, its one city and the commercial and industrial center of a territory that extends into New York State. The city probably has

had more publications than all the remainder of the county. As regards its today newspapers, they are published by "The Bradford Newspapers," one of the largest and most completely and modernly equipped companies in northwestern Pennsylvania. From this corporation's own beautifully illustrated "Story of Your Newspapers," we quote the very brief story of its publications:

"The history of Bradford newspapers goes back to 1858. The name of the little settlement, which is now the City of Bradford, was Littleton, and four years after the change of



(Courtesy of the Mercer County Dispatch and Republican)

Mercer Post Office, Dedicated July 2, 1939

name, Colonel Sam C. Crane established the 'Bradford Mines,' the first issue bearing the date March 12, 1858, and which he edited about a year. Colonel J. K. Haffey followed Colonel Crane and he in turn was followed by C. D. Webster. It was a lively little sheet dealing largely with wild animal exploits and social affairs.

"Next came the 'Bradford New Era,' the first number with the date August 28, 1875, and Colonel Haffey the editor. On October 29, 1877, the name became 'The Bradford Era' and, later on, the 'Era' merged with the 'Daily Blaze,' a paper

established in the fall of 1878 by David Armstrong. The 'Era' name was retained and 'The Daily Blaze' dropped. The 'Blaze' had a spectacular career while it lasted. It appeared one day printed in bright red ink as a symbol of hostility to the existing order of things.

"Then came the 'Evening Star' in 1879, established by Eben Brewer. This paper passed through many hands until 1882, when the Star Publishing Company was incorporated. 'The Bradford Daily Record,' sponsored by Senator Lewis Emery, Jr., and established about 1890, was merged with the 'Star' after the turn of the century and the Bradford evening paper still carries the two names.

"The 'Bradford Herald' is also an old servitor of this locality. It was established August 4, 1878, by the labor interests and was purchased in 1898 by Mrs. Ada Cable, a woman of intrepid character and much ability, and through her heroic efforts the 'Herald' became the Sunday newspaper. Many other papers came and went. The history of the newspaper establishment, with a long list of prominent and able men who tried to keep going, cannot be put down here as it would require much space, but, in this interesting period when Bradford fairly burst her bounds with her spare energy, newspaper offices were magnets for much talent.

"With the entrance of the new century, Bradford had completed its youth and entered into the more dignified state of a real city. Its newspapers progressed with it and under able, efficient ownership and management during the years, today stand out as THE BRADFORD NEWSPAPERS . . . the 'Bradford Era' in the morning, the 'Star-Record' in the afternoon, and the 'Bradford Herald' on Sunday morning."

Says one commentator:

"The sound policy of consolidated newspaper publication in Bradford is the product of the vision, courage, and able leadership of the Hon. Robert P. Habgood, who has been in full charge since Milton R. Shale purchased the 'Era.' He conceived the advantages which could be made to accrue to the whole community by the production of Bradford's newspapers in a single plant. Widely acclaimed success of the undertaking evident in the improved tone of the papers, their

modernized styling, and increased efficiency, is proof of the wisdom of his foresight."

Mr. Habgood is ably assisted by his son, R. P. Habgood, Jr., an executive familiar with all phases of the business, and by William Ingersoll, editor.

In Port Allegany, "The Reporter" was established May 22, 1924, by Editor A. J. Hughes. The "Press," edited by Bert G. Bartle, came later, and was published for several years before being followed by the "Port Allegany Argus," with Fred S. Blackman as editor. The "Argus" was sold to C. E. Boller, who at that time owned the "Reporter" and they were combined as the "Reporter-Argus" of today, edited and published on Thursdays by Charles F. Boller.

Warren County—More than one-third of the people of Warren County live in the borough of Warren. Its "Times-Mirror" serves a far wider population than the borough, as is indicated by its large circulation. E. C. Lowry is editor, and the Times Publishing Company prints its daily, except Sunday, evening editions. No claim is made to antiquity of origin, despite the fact that there must be some derivation from some older journal, of which Warren had many, even back to the time when Meadville, Erie and Franklin were the only three places in northwestern Pennsylvania that had newspapers. The "Times-Mirror" was established in 1900 and prides itself on vigor rather than age. Yet there was the "Warren Mirror," started as a Sunday paper on October 1, 1882, by the Walker brothers, which on October 16, 1883, became the property of E. Walker. A Saturday edition came out July 12, 1884, and the "Daily Mirror" was first issued on March 24, 1886. S. E. Walker was editor of the "Times-Mirror" well on into the 1930s.

A decade ago (1932) the newspapers of Warren County included the above daily, the "Tidioute Tribune," the "Youngsville Courier" and the "Sheffield Observer." The "Tidioute Tribune" was founded in 1929 and was published on Fridays, with Fred Aucker as editor. The "Youngsville Courier," established in 1907, is published on Thursdays, and is Republican in politics. The "Sheffield Observer" came out in 1907 as a Thursday weekly, and in 1939 was published by Mrs. Nell Watts, and edited by Reginald L. Watts.

Warren County newspaper history in general began in 1824, when Richard Hill, former resident of Mercer County, moved to the log cabin and frame building hamlet of Warren and announced that he was going to print a paper. Personally unimpressive, he yet was

able to persuade the people of the village and country to get up a subscription list of two hundred. In a still unfinished cabin, Hill brought out the first number of the "Conewango Emigrant" on July 24, 1824. Some authorities hold that the rickety press he used was the same on which Benjamin Franklin struck off Continental money. The "Emigrant" lived a short and precarious life. Two years later its successor, the "Warren Gazette," began publication, February 18, 1826. Its last number was dated March 4, 1829. The political atmosphere had changed, so in November, 1829, the "Voice of the People" came upon the scene, and figured prominently in city and county newspaperdom until late in 1835. In 1830, the anti-Masonic paper, "The Union," was started, to last some two years. The "Warren Bulletin," descendant of "The Voice of the People," issued a first copy on May 11, 1836; in 1840 it was succeeded by the "Democratic Advocate," and under numerous changes of management held on to March, 1847. After a lapse of a few months it became the "Warren Standard," which was burned out March 6, 1849. Goodrich, the owner, secured backing, however, and in May, 1849, began the publication of the "Warren Ledger," which continued publication over one of the longest periods of Warren journalistic history.

To some future compiler the roll call of Warren County newspapers during the past half century must be consigned. Here we list some of those that made history, more or less, prior to the 1890s: "The People's Monitor" (1838); "Allegheny Mail" (1848); "Warren Mail" (1849); "Youngsville Express" (1849); "Tidioute Journal," "Commercial Chronicle," and the "Weekly News." There was also the "Clarendon Record" (1882), changed to "Clarendon Herald" in 1884, and sold to the "Warren Ledger" in 1885 or 1886. The "Evening Paragraph" was founded at Warren, September 22, 1884, and brought out the "Weekly Paragraph" almost exactly a year later. "The Sugar Grove News" was established in December, 1884, and the "Bear Lake Record" made its début November 4, 1886. J. S. Schenck, from whom some of the above records were derived, concluded:

"As a general thing the early printing establishments were purchased by the leading men of a political party, and the use of them given to those who could publish a paper. A very little money and promises to pay were passed from the ostensible buyer to the seller. Nevertheless, the old papers were

largely instrumental in the growth, prosperity, intelligence and respectability of town and country; and, with few exceptions their editors and publishers, those who toiled and struggled, and spent their time and substance in maintaining them, deserve to be held in grateful remembrance."

Jefferson County—Jefferson County was laid out for judicial purposes in 1830, and two years later John J. Y. Thomason brought to Brookville, the county shire, the first newspaper to be published in the county. It was called the "Jeffersonian Democrat," which has for more than a century been the name of the only Democratic journal in the county. However, the first of the title left for Clarion County after six years, and the lineage of the present "Jeffersonian Democrat" is traced to "The Backwoodsman," founded by Thomas Hastings and his son John, in 1838 (not 1829, as long supposed), probably in March. In 1841, the Hastings' interests were purchased by William Jack and Levi Glover, and in turn David Barclay and Barton T. Hastings assumed control, and the name became "The Jeffersonian." On November 10, 1846, Evans R. Brady and Clark Wilson became owners, and on January 19, 1847, because the paper carried the legal and official advertising of Elk County, the resounding title "The Jefferson Democrat and Jefferson and Elk County Advertiser" was saddled upon the still small journal. But not for long, however, for on September sixteenth of that year it was shortened to "Jefferson and Elk County Advertiser." In 1851 it was christened the "Brookville Jeffersonian"; in 1865 it was sold to Captain J. P. George, who at the same time purchased "The New Era" and combined the two as the "Brookville Herald." In May, 1869, it was sold to G. Nelson Smith, who changed the name back to "The Jeffersonian." After six months the plant was back in the hands of Captain George. With various associates and editors the beloved captain carried on until June, 1884, when it was taken over by Major John McMurray and William L. Sansom, and merged with the "Brookville Democrat." Since that time the publication has been known as the "Jeffersonian Democrat."

The former "Brookville Democrat" was started September 8, 1876, by William G. Clark and William F. Brady, as the "Jefferson County Graphic." On March 19, 1879, it was consolidated with the "Democrat" as the "Graphic-Democrat." The "Democrat" had printed its first edition on January 16, 1878, A. A. Carlisle, editor, and sold to Major McMurray, on Christmas Day, that same year.

One of the most interesting features of the newspaper history of northwestern Pennsylvania is the control of the principal Democratic publications of Jefferson and Clarion counties held by just two families over a period of more than half a century. The founders of these two families were closely associated during their early years in the newspaper game. These papers were the "Clarion Democrat" and the "Jeffersonian Democrat," both more than a hundred years old, the former getting out a centennial edition in 1940, the latter in 1939. The family, in Brookville, is that of McMurray, grandfather, his sons and grandsons; in Clarion it is that of William L. Sansom, of previous mention. That the two families became permanently identified with one county rather than the other was probably a matter of chance.

The story of this chance is briefly this: William L. Sansom, on January 1, 1880, became associated with Major John McMurray and the Brookville "Democrat," as the firm of McMurray & Sansom, in 1884 publishers and editors of the "Jeffersonian-Democrat," an arrangement that was continued to 1889, when McMurray sold his "Jeffersonian-Democrat" interest to Sansom and went to Clarion to publish the "Democrat" of that place. After about a year the two men "swapped" papers and each thereafter remained in their respective posts to their deaths. William L. Sansom died on April 12, 1897.

"Statesman, soldier, editor, untiring worker and student, but above all else a devoted Christian and public-spirited citizen, Major John McMurray, editor of the 'Jeffersonian-Democrat' and the Brookville 'Democrat' for over forty years, contributed more than any other individual to the 'Jeffersonian-Democrat's' century of service to Brookville and Jefferson County. He won his military title 'For long and faithful services and for gallant conduct on the battlefield,' during the Civil War." He filled several public offices, especially with the Federal Interior Department throughout the first administration of President Grover Cleveland, and was prominent in fraternal, civic and religious organizations. His leadership in Brookville newspaperdom has already been outlined. Major McMurray, born June 12, 1838, lived to September 4, 1920. Following his demise, the "Jeffersonian-Democrat" passed into the hands of his sons, Harry and Archie J. McMurray. Harry McMurray, an expert printer over a period of four decades, lived but a few months to enjoy his inheritance. Ownership then passed to the third generation, when Archie J. McMurray sold his holdings in

the "Jeffersonian-Democrat" in March, 1921, to John J. and Harry Eugene McMurray, sons of Harry. John J. McMurray took over the editorial duties of the paper in 1925, and had made it one of the outstanding weeklies in Pennsylvania journalism, before he resigned in 1926 to become postmaster of Brookville. Archie J. McMurray, although then in his seventies, assumed the editorship until January, 1937, when he retired, succeeded for a few months by James Ferguson, and then by the present editor, Frank L. Craig. John J. McMurray died August 20, 1939, and his widow, Mrs. B. Paula Fields McMurray, an experienced newswoman in her own achievements, became co-owner of the "Jeffersonian-Democrat."

Brookville and this section of the county is certainly not a one-party district, and supports liberally the "Brookville American," although its party has been out of power for a decade. To one of its staff members we consign the responsibility and our thanks for the following brief story of its development:

The "Brookville American" was founded in March, 1918, by a group of Brookville merchants, professional and business men at a time when the district was not represented by an outright Republican newspaper. It was initiated soon after the new corporation sold sufficient stock to purchase the old American House hotel at the corner of Pickering and Madison streets in the Jefferson County seat. The machinery, type and other miscellaneous equipment was purchased from the old "Brockway Record" and moved to Brookville. John C. Dight was the first editor of the newspaper and got it off to a booming start. There were approximately 160 stockholders, residents of all areas of Jefferson County, when the newspaper was first issued and the list has depreciated little since that time. Dight edited the newspaper for three years, leaving Brookville in 1922 to assume the management of a newspaper of his own in Butler County. He successively rose to several major positions in bureaus of the State government.

The second editor of the "American" was Dan T. Balmer, a native of Brookville, son of Dr. A. F. Balmer, and a veteran of the World War. He occupied the editor's chair from 1922 until 1928, when William L. Ingersoll assumed the duties. Balmer gained considerable fame as a historian of his district. Ingersoll filled the editor's office until 1937, when he resigned to assume a position with the editorial department of the "Philadelphia Bulletin." He now is editorial manager of the Bradford, Pennsylvania, newspapers.

W. O. Carlton, present editor and manager, came to "The American" in April, 1937, from the United Press Bureau in Pitts-

burgh. While in Pittsburgh for almost four years Carlton was successively wire filer, staff correspondent and night manager of the UP Bureau. Carlton is a nephew of Pierre L. and Sidney S. Smith, editor and city editor of "The Punxsutawney Spirit," only daily newspaper in Jefferson County, and a grandson of W. O. Smith, founder of "The Spirit," one of the county's progressive leaders for years and twice its representative in Congress.

The "American" is a seven-column newspaper printed on Wednesdays and issued Thursday mornings. It has boasted for several years of having the largest weekly circulation in northwestern Pennsylvania, principally because it absorbed, in May, 1940, all the assets, etc., of "The Brookville Republican," an eighty-five-year-old weekly in the same town. The circulation of the combined papers, known as "The Brookville American," reaches all districts of northern Jefferson County and parts of Elk, Forest, Clarion and Armstrong counties.

Essentially modern Bodoni type is used throughout "The American" along with other modern typographical methods which make it exceptionally readable. Editor Carlton has been responsible for the departmentalization of most of the news and other innovations which have readily found themselves adopted by other newspapers in the area. The "American" also is a consistent winner in the annual contests promoted by the Pennsylvania Newspaper Publishers' Association. It has never failed, within many recent years, to win at least one award in front page, editorial, sports or general production classifications.

In the plant proper is considerable machinery which has gained this newspaper the reputation as being one of the better equipped in a wide area. Two relatively new linotype machines do ninety-eight per cent. of the work for all job work in addition to the newspaper. Seldom are there more than a half dozen lines of hand-set type in a ten-page edition of the newspaper, the bulk of the type all being set on the two machines. The paper is printed on a two-revolution Whitlock press and folded on a Dexter folder. Make-up tables, composition tables and type cases all are arranged on the newspaper side of the plant so that type matter runs progressively from the type-setting machines directly to the news press.

In the job printing department are two Chandler & Price 8x12 platen presses, a Chandler & Price 10x15 and a Chandler & Price 14x22. In this department also is a Babcock pony press used for printing ballots, school year books, etc., of which "The American" does

many, in addition to paper cutters, stitchers, staplers, stereotypers, type cases, make-up tables, etc. In the basement is a large melting furnace, where the type metal is cast for use in the type-setting machines.

The business office is directly off Pickering Street in the front of the plant and is completely equipped. Zetta Daugherty is society editor; Louis J. Wontenay is foreman of the shop; John E. McQuown is linotype operator; Wesley Hice is compositor and pressman, and John Buzzard is pressman and stereotyper for the corporation. The length of service of these employees averages twelve years.

Of the "Brookville Republican," taken over by the "American" in recent years, may we state that it was no fly-by-night paper, but a thoroughly good one of long life and effective works. It was founded (printed) August 10, 1859, by an old-time master printer, one John Scott, of whom tradition says that he promised to "continue the 'Republican' until he got hungry." Incidentally his plant was located opposite the town jail. The aged Mr. Scott ran everything by himself until 1866 and, in November, 1874, while still going strong, the home of the newspaper was completely destroyed by fire. It resumed publication six weeks later, and shortly after was taken over by new proprietors, F. A. Weaver & Company, and the Weaver family operated it for many years. A number of prominent names in Pennsylvania and other states were either connected with the editing of the publication, or learned their craft or profession as members of the staff.

Punxsutawney is the largest borough in Jefferson County, more than double the population of any other, and the only place that has a daily newspaper. In 1942 the "Punxsutawney Spirit," dating from 1872 or 1873, issues an evening, except Sunday, edition of between five and six thousand copies, edited by P. L. Smith. In contemporary publications we are told that the "Spirit" started as a weekly under the name, "Mahoning Valley Spirit," under the management of Frank M. Smith. Six months later it was disposed of to W. P. Hastings and G. M. Peck, and three years later Hastings was in control and rechristened his child as the "Punxsutawney Spirit." It absorbed the "Punxsutawney Tribune," established in 1884, and in 1885 Davis W. Goheen bought both papers and consolidated them under the present title, with W. O. Smith as editor. There were several changes of ownership before 1904, when the Spirit Publishing Company was incorporated, with W. O. Smith as president. In about

1921, Mr. Smith and his sons, P. L. and Sidney Smith, secured the majority of stock. W. O. Smith died in 1932, and his son, P. L. Smith, for twenty-three years city editor, became managing editor and president of the corporation. Sidney Smith succeeded to the desk of city editor and later was made managing editor. Another son, E. G. Smith, also became active in the company. The "Punxsutawney Spirit" prides itself on being the second largest among the privately owned industries in the community.

The "Post-Dispatch" of Sykesville was established on St. Patrick's Day, March 17, 1905, by its present editor, Otto J. Nupp, and during its first three years was published by the "DuBois Morning Journal." The first newspaper press and job printing press were installed in the Sykesville plant in 1907 and 1908, and the Nupp Printing Company name was adopted. Many changes in equipment have marked the almost four decades of its history, and there were two or three changes in location up to November, 1928, when the "Post-Dispatch" moved to its own building. It serves one of the chief bituminous coal regions of western Pennsylvania, a section of diversified industries and Mahoning Valley agriculture. The "Punxsutawney News," founded in 1885, is a Wednesday weekly, independent in politics, issued by the News Publishing Company, with Horace G. Miller, Jr., editor.

On May 11, 1942, "The Star" of Reynoldsville celebrated its fiftieth birthday. It was founded in that month in 1892, by Clarence A. Stephenson, and purchased at his death in 1910 by Charles S. Lord, its present owner and publisher. Paul R. Cochran was its editor in 1942. The paper comes out on Wednesdays, and is Republican in politics. At least two things about "The Star" are worthy of thoughtful consideration: 1. That it must have served the community well to have survived one of the most difficult half centuries in the affairs of our country and Reynoldsville. 2. For forty-five years Charles S. Lord has been identified with this publication.

The "Brockway Record" has been published under its present title since 1926, when Brockwayville became Brockway. At that time it already was years old. Two papers had previously represented this community, the "Brockwayville Register," started June 1, 1871, by R. O. Moorhead. Enlarged and improved, it was known three years later as the "Brockwayville Free Press," and within a year disappeared. In February, 1885, the "Brockwayville Record" made its bow, and remained in public life to 1917, when its assets were bought by the "Brookville American." In 1919, H. B. Welch

purchased newspaper equipment and brought it to the town to publish the "Brockwayville Record." Three years later, in March, the whole business was sold to the Brockwayville Publishing Company, of which E. J. Durbin was manager and editor, hence the customary way of saying that the "Record" dates from 1922, instead of 1919, or even 1885. Mr. Durbin operated the paper until his death, in May, 1937, since when it has been ably conducted by his widow, Rose C. Durbin, as editor, with her son, Ralph E. Durbin, as manager. The journal has always been independent in politics, comes out on Fridays, and since 1926 has been the "Brockway Record."

Elk County—Even a hardened newspaperman cannot fail to take his hat off to the Fourth Estate of Elk County. This section of northwestern Pennsylvania, more than eight hundred square miles in area, with a scattered population of 34,443 in 1940, has three boroughs; Ridgway, population 6,253; St. Marys, 7,653; and Johnsonburg, population 4,885, yet they have maintained two dailies and one semi-weekly for the past thirty-two to forty-five years. The "Johnsonburg Press" was established in 1896, and Alva H. Gregory has long been its editor and publisher. It comes to the public on Tuesdays and Fridays, is independent in politics, and has a wide circulation.

The "Ridgway Record," founded in 1903, is published daily, except Sundays and holidays, by the Ridgway Publishing Company, and edited by the well-known W. B. Wagoner. The journal is independent in its political views and support of parties, and wields a potent influence in the affairs of Ridgway, the county seat of Elk County.

The baby of the group of three is no stripling. It was born on February 11, 1910, and long since celebrated its silver anniversary. It is the "Daily Press" of St. Marys, inaugurated by two enterprising young men, J. A. Dippold and William Timm, with Joseph Helfrick as the practical printer, the boys adopting the trade name of The Commercial Printing Company. The founders had competition in the "Elk County Gazette" and the "St. Marys Enterprise." How Dippold and Timm ever got the notion that a daily edition should be issued, we cannot guess, but on February 1, 1910, the "Daily Press" made its appearance, and for a month was delivered free to every home in St. Marys. This scheme did not work so well, but a few advertisers bought space and some of these have never since failed to have an advertisement in the "Daily Press." Mr. Dippold

had to buy out the interest of others in the company to keep the paper going in that initial year. By most people the journal was given about three months to live. In the style that has become prevalent in present days, a fine story might be written about the "Daily Press" and its personnel; of how it overcame almost insurmountable obstacles in reaching the hearts and homes of the residents of St. Marys; its first regular editorial in 1914, that gave a local figure an opportunity to state his ideas without regard to "boiler plate"; of good presses and modern equipment purchased before they seemed to be required; the necessity for leadership when to follow public opinion and support was the easier way. G. A. Mohr, McLaughlin, O'Brien and James A. Dippold, second son of the publisher, are editorial names that are held in memory of those who work on the "Daily Press" and the people of St. Marys. At the mast-head of the 1935 special edition are the names: J. A. Dippold, president and manager; James A. Dippold, of whom it has been said that "printer's ink ran in his veins," editor. In the summer of 1942 the names read: W. G. Bauer, president and manager; H. T. O'Brien, editor; A. G. Brehm, secretary and treasurer and business manager; James A. Dippold, city editor. This inadequate story of the "Daily Press," although derived from material given by Albert G. Brehm, is no fault of his, for he is a well-recognized historian of Elk County, whose work in this connection spans four decades.

Other Counties—Cameron and Forest counties are the youngest and smallest in population of the twelve divisions of northwestern Pennsylvania. Cameron County has the "Press-Independent" of Emporium, the county seat, which includes more than half the population of the county. The newspaper traces back through various publications to 1866, and is therefore more than three-quarters of a century old. Practically from the beginning it has been an independent in political affairs. The "Press-Independent" goes to press on Thursdays, is printed by the Emporium Publishing Company, and its editorial policies are under the direction of W. E. Nelson. Its circulation is well above that of the so-called country journals.

Forest is the least populous of counties, with two small communities, Tionesta, the county seat, and Marienville, former shire-town. The "Marienville Express" is edited and published by William M. Pickens, as a Thursday weekly. The "Forest Republican," of Tionesta, was founded in 1868, and since the first has been

staunchly Republican. It comes out on Wednesdays under editor H. T. Klinestiver, and is considered one of the authentic institutions of Forest County, among the very oldest of the business concerns of Tionesta.

To the editors and newspapers of northwestern Pennsylvania who have not been named in this chapter—apologies. To those who responded and contributed material—sincere thanks to you. Time waits for no man, not even for a newspaperman or compiler. Incidental to the contacts with the gentlemen of the Fourth Estate has been their appreciation of the folk who, long since and more recently have left their home cities and towns and continue their reading of local publications. Some years ago, John Kelley, of the "Erie Daily Times," put on paper a number of verses, entitled "The Home Town Paper," four of which may appropriately be reprinted as the finale of this chapter:

When the evenin' meal is over an' the dishes put away,
An' a feller in his slippered feet loads up his Henry Clay,
There's nothin' does him so much good, be fortune up or down,
As the little country paper from his ol' home town.

It ain't a thing of beauty an' its print ain't always clean,
But it straightens out his temper when a feller's feelin' mean;
It takes the wrinkles off his face an' brushes off the frown,
That little country paper from his ol' home town.

I read the daily papers an' religious papers, too,
An' sometimes ancient school books when I've nothin' else to do;
But when I want some real live news from all the country roun'
Give me the little paper from my ol' home town.

They say our good and bad deeds are recorded up on high,
So that God can classify us when it comes our time to die;
If that be true I know a chap who's goin' to wear a crown—
The man who runs the paper in my ol' home town.

CHAPTER XII

Agriculture

Although Pennsylvania is noted as being the great industrial State of the Nation, it also enjoys a high rating in the very important field of agriculture. Pennsylvania, together with the bordering states of New Jersey, Delaware, Maryland and West Virginia gives the farmers the advantage of the most concentrated population in the country—a field consuming more food products than it produces. Statistics for the year 1930 give the population of this region per square mile of land area, average 196, and for the remaining states, thirty-seven. With immediate home markets, most farm products are delivered without freight costs, and in any case, with only a very low freight cost. Motor trucks are used more extensively than in any other section of the country.

Only one State has a rural population greater than Pennsylvania's. The State's *rural* population is *greater* than the total population in each of thirty-six states. Forty-four of the State's counties have more rural than urban population. Rural, by United States Census definition, means people living on farms or in towns under two thousand five hundred population.

The 1940 census reveals 169,027 farms in Pennsylvania. The State exceeds forty-one other states in farms operated by full owners. The 1940 census agricultural industry investment in the State is stated as \$1,133,886,388, and gross farm income for 1941 was \$327,754,000, including government payments, or a return of 28.9 per cent. on the 1940 valuation. The State's 1941 total farm cash income increased 16 per cent. over the 1940 income of \$282,499,000 and in the matter of cash income stands twelfth among all of the states. Over a period of years Pennsylvania has ranked from fourteenth to eighth among the states in this respect. It is interesting to note the narrow range of cash income in the State in the different months of the year: in 1941, the range was from 6.7 per cent. in January to 10.8 in September. Pennsylvania is a profitable farm market

largely because of diversification of crops and live stock, high cash income evenly distributed throughout the year and progressive farm families. The cash income figures quoted represent farm cash income and do not include the substantial revenue many farms receive from underlying oil, gas and coal, nor the earnings from off-season work



Down Town View of Sharon from the Air

in nearby mills and factories. Another factor that is of great advantage to the agricultural interests of the State is the extent of modern improved highways, a total of 33,523 miles, which is greater than that of any other State, and, too, greater than the total in many of the nations of the world. In addition the State has over 44,000 miles of second-class township roads.

Pennsylvania is one of the first ten leading states in live stock, the value of which, as of January 1, 1939, was \$161,995,000. Milch

cows and heifers, two years old and over, on Pennsylvania farms in 1940 numbered 914,000, an increase of 27,000 in the three years previous, and valued at \$69,464,000. The State leads all states except two in cash income from sale of dairy products; 1941 income from this source, \$115,332,000, an increase over that of 1940 of 14.5 per cent. Value of sales of milk and cream in 1941 was \$30,444,000, leading all states of the country and nearly ten million dollars higher than New York, the second State in this respect. In 1940 Pennsylvania's farmers retailed over 35 per cent. more milk and cream than farmers in any other State. The State's farm price of milk in 1940, including both wholesale and retail sales, was 50 per cent. higher than the average of the entire country. The State stands second among all of the states in cash income from chickens and eggs; 1941 income, \$62,479,000, an increase of 25.6 per cent. over that of 1940. In the value of eggs produced, Pennsylvania is first among all of the states; total value in 1939, \$37,242,000, more than seven million dollars greater than in all of the New England States combined. Pennsylvania stands seventh among the states in value of farm buildings; fourth in number of farms having electric service; fifth in value of farm implements and machinery per acre of crop land harvested in 1939, and first among the large acreage states, Pennsylvania having over 6,000,000 acres. In 1940, 93.7 per cent. of all Pennsylvania farms had automobiles and 32 per cent. had motor trucks; one out of every three farms in Pennsylvania had gas engines; 55.3 per cent. of Pennsylvania land area is in farm land. Although Pennsylvania is the thirty-second State in size, its high-value crops placed it ninth in the entire United States in cash income from field crops in 1940 (\$84,307,000).

In 1940, Pennsylvania farmers raised 48,324,000 pounds of tobacco and continues to rank first in production of cigar filler. Some years Pennsylvania is the first State in the Union in cash income from potatoes grown; in 1940 the position of the State in this respect was fourth from the sale of the fifth largest crop in the United States. Pennsylvania potatoes returned to the grower forty cents per bushel more than Idaho potatoes and seventeen cents per bushel more than Maine potatoes, and Pennsylvania farmers received the *highest average potato price* of any of the eighteen surplus late potato states. In the value of vegetables harvested, excluding Irish and sweet potatoes, the State stands seventh. Only ten other states exceeded Pennsylvania's 1940 winter wheat production of 18,594,000 bushels. The State generally leads all states in cash income from buckwheat.

In the production of rye, Pennsylvania was exceeded by only eight states in 1940. Only two states outrank Pennsylvania in the production of commercial apples; total production in the State in 1939 equaled 16,564,000 bushels, an increase over 1938 of 7,000,000 bushels. The State ranks eighth in peach production and fifth in grape production. Pennsylvania's 1939 grape crop was 48 per cent. larger than in 1938, amounting to 23,200 tons with a value of \$882,000. Keystone farmers received \$22 a ton above the average price received by the United States grape growers. The 1940 crop equaled this high record. In 1939 Pennsylvania farmers produced more corn per acre than did farmers in forty-one other states; the State's production was 58,140,000 bushels. With a 3,250,000 ton hay crop in 1940, Pennsylvania ranks sixth in value of production.

Although the northwestern Pennsylvania counties constitute an important part of the great industrial area of the State and these counties have developed a great and diversified industrial contribution, and the further fact that, naturally, the production of petroleum and natural gas and the refining and processing of petroleum has for so many years been a major activity in a good portion of the area, which tended to interfere with agricultural development, these counties have really made an excellent record in most of the phases of agriculture that have brought recognition to the State as a whole.

The following statistics pertain to the year 1941, farm cash income being exclusive of government payments:

<i>County</i>	<i>Agricultural Industry Investment</i>	<i>Farm Cash Income</i>	<i>Number of Farms</i>
Cameron	\$504,862	\$160,757	165
Clarion	11,513,963	2,636,415	2,199
Clearfield	10,309,019	2,443,506	3,530
Crawford	26,960,343	8,327,213	5,596
Elk	3,109,547	803,785	720
Erie	25,551,281	8,037,850	4,503
Forest	1,004,199	257,211	276
Jefferson	9,351,940	2,765,020	2,356
McKean	5,920,349	1,478,964	1,234
Mercer	21,176,379	5,304,981	3,764
Venango	8,772,707	2,121,992	2,294
Warren	8,582,745	2,765,020	2,028

The rural population of these counties is as follows:

Cameron	3,077
*Clarion	34,612

*Clearfield	67,220
*Crawford	44,599
Elk	15,582
Erie	46,534
*Forest	5,791
*Jefferson	33,827
*McKean	32,849
Mercer	41,944
Venango	29,941
*Warren	27,898

*More rural than urban population.

In most of the branches of agriculture, the counties of Erie, Crawford, Mercer, Clarion and Jefferson take the lead in the region, and these counties have been less prominent in the petroleum industry.

In the value of field crops produced in the State, the counties of Erie, Crawford and Mercer are among the first fourteen of the State; in the production of corn, the same counties are among the first eleven of the State; in hay acreage in the State, the same counties are among the first fifteen counties of the State. In the production of potatoes, Erie County is fourth among the counties of the State; Crawford County is seventh and Mercer is eleventh. Crawford leads all counties in the State in oats threshed, Mercer comes third and Erie fourth, with Clarion twelfth. In the production of buckwheat, Crawford County is first in the State; Erie County, sixth; Jefferson County seventh; and Clarion County, eighth.

Erie County ranks eighth among the counties of the State in the production of apples; eighth both in peaches and pears and first in cherries. In the production of grapes, Erie County leads all counties of the State. The 1939 production of grapes in Erie County amounted to 16,456.31 tons with a value of \$592,430, while the total for the State was 23,200 tons with a value of \$882,000. The region in Erie County along the shore of Lake Erie is noted for the production of small fruits.

In the value of live stock on farms in the State, Crawford County stands sixth among the counties with a value of \$5,127,910; Erie County, eleventh with a value of \$3,918,920; and Mercer, thirteenth with a value of \$3,706,300. In the number of milk cows and heifers two years old and over, Crawford stands fourth in the State with 38,910; Erie, sixth with 28,940, and Mercer, eleventh with 25,670. In the number of dairy farms, Crawford County stands third in the

State with 4,478; Erie County, sixth with 3,427, and Mercer County, ninth with 3,121. In the number of all cattle on Pennsylvania farms, Crawford County stands third among the counties with 62,220; Mercer County, ninth with 44,870, and Erie County, tenth with 44,750. In the number of poultry farms in the State, Crawford County stands fourth with 4,218; Mercer County, eleventh with 3,242, and Erie County, twelfth with 3,119.

It is a well recognized fact and frankly admitted by the growers of other states that Pennsylvania produces the finest quality apples grown anywhere in the world. And the very finest of these Pennsylvania apples are grown in the northwestern counties. Although many varieties are grown in this region, the following varieties have been developed to the highest degree of perfection: the Northern Spy, red Delicious, McIntosh, King and Cortland.

Venango County has an organization known as the Venango County Fruit Growers and Farmers Association and, alternately each year, in Franklin and Oil City, an exhibition of farm products is held at which the feature of greatest interest is the display of apples. Due to war conditions, this annual exhibition will not be held in 1942, the first omission in about twenty-five years.

Both apple culture and sheep raising are increasing in some of the northwestern counties and extensive development of apple culture would be justified due to the very superior quality of that fruit grown in this region. A number of scientific growers have been very successful and always find a ready market for their apples.

Development of Farming—The settlement of northwestern Pennsylvania, like that of America itself, was due to mixed motives: Love of the land or greed for it if you wish, hope for financial security or freedom from want, speculation and the rapid making of dollars, freedom of religion and speech, to escape from the law, or just that urge that somehow has carried civilization ever towards the West. Whatever the motive, the most of the pioneers of the region engaged in agriculture, although this part of the State was one of the most heavily wooded areas of our country to be utilized in the first half of the nineteenth century.

Going back to the prehistoric, there are evidences extant that the Mound Builders once dwelt in a few parts of this land of Pennsylvania, and from tools discovered in their mounds it is judged they knew something about the cultivation of the soil, the planting of seeds and the reaping of harvests. Whether they disappeared before the rise of the Indian, and whether these red aborigines learned any-

thing from their predecessors, we do not know. Whether the Mound Builders passed on to the Indians, directly or accidentally, such important contributions to northern agriculture as maize, squash, beans and tobacco, is a matter of conjecture. The Jesuit missionaries of the sixteenth century in their wide wanderings, recorded their findings of these things, which suggests the origin of the plants named was older than the lords of the country, the Indians.

Northwestern Pennsylvania, except along Lake Erie and some few sections of the northern counties, seems never to have been well populated by the aborigines, and such tribes as the Eries (the Wildcat Tribe) and the so-called "Neutre" Indians, were apparently of a lower grade and less advanced in civilization than the Iroquois or the Six Nations of New York. The highlands of the wilderness were more sections in which they hunted, than of more or less fixed habitation. To an extent the land along the boundary between the present states of New York and Pennsylvania appears to have been a sort of no-man's land wherein the tribes roamed at the risk of their lives, while hunting raiment and food from the numerous denizens of the woods. It was, therefore, one of the many sites of the first "animal industry" in the New World, and on much of the same area is located the dairying and cattle business, now the outstanding feature of northwestern Pennsylvania agriculture.

Leaving the subject of Indian farming and products until later in this chapter, let it be acknowledged here that no matter how lazy the Indian is supposed to have been, there were groups of them who would turn from furs to farming, and however improvident by nature, collected great stores of grains and provisions for winter use. When the white man came they gave the strangers fully acclimated plants, showed how to cultivate and fertilize them, and taught methods of preserving vegetables and meats by drying and smoking. Evidently the Iroquois did not know the use of salt as a preservative. They helped the white man a great deal and in turn had the good sense to try out new plants and seeds, especially of fruit, and established many orchards. If the Mound Builder and the Indian laid the base upon which the agriculture of northwestern Pennsylvania is built, it was the pioneer and the machine age that completed the job. These might well be called the "Four Eras of Agriculture" in northwestern Pennsylvania, a high-sounding title that conveys little information.

To attempt to expound the agricultural history of this region by periods would be difficult, for it lacks the steady progress and distinct changes characteristic of industrial or other history. Farming

advances were made by fits and starts; progress in one locality seems to have affected other places but little; factors enter the picture unrelated to the section or the State at large. Those who attempt research on the pioneer agriculture find themselves with meager material. Statistics were not gathered of the basic industry of the Commonwealth, until years later when manufacturing was beginning to win the race for supremacy as the outstanding business of the State. True there were organizations and groups of farmers that presented series of reports, but early agricultural societies promoted discussions of academic problems of local farming and neglected to record for posterity just what was being done, how much of it, and trends in production. The reports read more like the tales of a writer of fiction, than of farmers wrestling a living from the soil. The members of these groups enjoyed themselves immensely at the quarterly or annual meetings, and deserved to, but from their reports we can gather little except that agriculture, like Topsy, never was born—it just grew.

There are, however, a few factors in the rise of agriculture that can be recognized or traced, such as the natural qualifications of the region for farming—geology, topography, drainage and waterways, climate and rainfall, transportation and markets, all of which have been well described in the opening chapters of this publication. Then there is the manner in which the territory was secured, the way in which it was portioned out to companies and individuals, the opening up to settlers and the successive waves of soil-tillers who made the country populous and prosperous. The most easily cultivated land was, of course, along the rivers and their tributaries, the shores of lakes, especially Lake Erie. To get to these the pioneers followed the streams and the Indian trails. When these streams were large enough to float boats of shallow draft, they not only gave access to markets, but also served the newcomer as a means of getting to the fabulous Northwest Territory, which in the early nineteenth century was Ohio and the present Middle West, and not the Pacific Northwest. Old paths and trails were broadened into horse trails. Crude roads (clay, mud or plank), turnpikes, highways, and eventually the railway, solved the problems of transportation. All contributed not only to the development of agriculture but to the changes it has witnessed.

At the turn into the nineteenth century, this was the situation: With the end of the Revolutionary War, the establishment of the United States, and the adjustment of the claims of various states to

territory in western New York and Pennsylvania, there was a vast area of land opened to the settlement. The situation did not find any lack of people, young people, veterans of the late war, who were eager to take advantage of conditions and pack up their few possessions and migrate to western Pennsylvania. From 1790 to 1850 they came in increasing numbers, perhaps with the exception of the whole War of 1812 period, which gravely retarded settlement. Incidentally during this period the ratio of increase of agriculturalists was far above that of the population in general. Farming, as regards the cultivation of the soil is concerned, as contrasted to pastures and hay lots, reached its height in northwestern Pennsylvania before the Civil War, and since the late 1870s there has been an irregular retrogression in the number of farms and the amount of acreage planted in cultivated crops.

The men who went into the wilds of western Pennsylvania carried few farming tools with them, because few had been invented or radically improved. Agriculture had been relatively stationary for more than a century and a half in America as regards tools and even methods. There were wrought iron hoes, the wooden pitchfork, the sickle, the scythe, and the wooden plow, which sometimes had a flat iron point or share. The iron plow, although invented in 1797, did not become really efficient and popular until more than half a century later. The scythe had been improved with a "cradle" which helped in the reaping of grain, but there were few who had the skill to make a good cradle. The principal tool of the time was the "man-killer," a heavy hoe, and with the four above-mentioned instruments and a brush harrow, the pioneer planted, cultivated and reaped his few crops for market. A strong man might scratch the surface of several acres in a day with his primitive plow, dodging trees and stumps that he had left to rot. He could hitch his wife or half-grown son, when he lacked an ox or horse, and drag a small tree over the roughened land as a harrow. Seeding was by hand, as was most of the cultivation of the crop, of which, when ripe, the head of the family could reap with cradle three or four acres from morning to night. By hand flailing, or the Biblical method of treading the grain out by oxen, the meager crop would be threshed. On a windy day, this was winnowed as it was poured from homemade baskets, much as in the days of Ruth.

One of the oddities of modern literature, whether fiction or biography, is the few and inadequate accounts of our farmer forefathers of the early years of the past century in the western sections of Penn

sylvania. They were of many racial origins and religions, came from all walks of life, yet few have attempted to limn portraits of them as they are known to their descendants from diaries, records and newspapers. One of the best pictures of men and conditions of a century and a quarter ago is drawn by J. G. White in his "History of Mercer County," published in 1909. Possibly no better service can be rendered the readers of this chapter than to condense some paragraphs from his article on "Pioneers and the First Fruits of Civilization," which genuinely deserves reading in full.

After calling attention to the fact that the early settlers were mainly young men, he comments: "The old people remained in the east." Many instances might be related about young men coming here unmarried, locating a tract of land, clearing part of it and sometimes building a house the first year. Late in the fall he returned to his former home to get married, and early in the spring the two set out for their new home. He usually had a horse on which the young wife rode, and on which were also carried a few indispensable household goods which could not be purchased here. Sometimes a well-to-do pioneer had two horses. If so, on one was a pack saddle on which was brought perhaps three hundred pounds of household utensils. In any event they brought a skillet, a pot, a few dishes, an ax and a mattock for clearing land. They generally brought some bedding material, although this was often entirely of skins of animals killed on the way or procured after their arrival. They also brought garden seeds and a few dry herbs to last them until new ones could be raised. Immigrants often brought seeds of favorite apple and peach trees, which they planted near their new home.

The settler himself usually walked all the way, carrying a rifle on his shoulder, for this he must have in the new country. With this outfit, if they had with them a few pounds of hard-baked bread, and if he was fortunate enough to shoot a deer, turkeys or other small game on the way, they were well supplied for a fortnight's journey through the wilderness. There were often days of travel without the sign of a human habitation. If the travelers were near a settler's house, be it ever so humble and crowded, they were always welcome. This long journey was usually made in the springtime, when sleeping outside was not dangerous nor inconvenient.

Seldom did a family locate in a new country alone. In case the community to which they were moving was entirely new, they formed a company in the east among their neighbors, who made the journey and located together. These companies were called colonies and

often had among them entire families who were being transplanted to the west.

Western Pennsylvania during its early history had few men who isolated themselves entirely from companionship and lived alone in the wilderness. Fur traders, of course, did this in the early days, but they were not generally considered among the thrifty pioneers who cleared away the primeval forest. The early pioneers were homemakers and, after the acquisition of land, what they most desired was neighbors. They did not come here to hunt and fish, nor to buy furs and skins from the Indians.

In house-building he was almost compelled to have neighbors, or at least some assistance in putting the logs in place. He could cut down and hew the timber, and perhaps a neighbor could help him to draw the hewn logs to the place selected for his house. Then came the "raising," which was a big occasion among our pioneer ancestors. The whole community assembled and put up the log house in a single day. Sometimes they cut and hewed the logs and fitted them into place between "sun-up" and "sun-down." A house fifteen by thirty feet, two rooms below and one or two above, was a very large house for that period. The ax was the principal tool used in house-building.

The entire house was generally built of logs of equal length, making no provisions for the door or for windows. The logs were afterwards sawed away for such openings. Sometimes there was a chimney in the center of the house, with a fireplace in each room, but this was a more elaborate style of architecture than the pioneer in his hurry usually adopted. The chimney was often at one side or end of the house, and frequently on the outside, in which case there was an opening through the logs for the fireplace. In most cases the chimneys were made of stone and mortar. A few that were more hurriedly constructed had chimneys made of small pieces of wood which were left in thick mortar, which thoroughly covered the inside and protected it fairly well from the sparks of the fire. This was the familiar "mud and stick" chimney. The earliest houses had no glass windows. Light was admitted through greased paper, and the light at best was very poor. Very little glass was manufactured in America then, and it was a luxury only indulged in by those who could afford to transport it from the east. Glass was first manufactured in Pittsburgh in 1791, but it was long years after that until it came into general use in making windows.

The furniture within the houses of that day was nearly all homemade, and in many instances without sawed lumber. Our day-

laborers would now scarcely live in such houses, even though they were rent free, yet those were the homes and castles of our ancestors. The second story of the log house of that day, if there was a second story, was generally called a loft, and was reached sometimes by a



(Holmes Crosby, Architect)

Moose Building, Sharon ("Jim" Davis' Home Lodge)

stairway, but often by a ladder or wooden pins driven into the logs. On the rafters were often hung pieces of smoked meat, all kinds of herbs for medicines, and clothes when not in use. The stables of the pioneer were built like the houses, but of smaller logs, and they were rarely hewn. The smaller logs were used so that the cracks between them might be less and thus protect the stock from wild animals, such

as bears or wolves, which roamed the country at will and were very destructive to domestic animals. The stables were not much of a protection against the blasts of winter, for the cracks between the logs were rarely closed.

When the early settler began to erect buildings he tried to locate them near a spring, and thus generally on the lower ground. In felling trees for his house and stable he was clearing his land, and thus his first fields were near his house. Afterwards he cut other trees, rolled them together and burned them. The forest was further cleared by deadening trees, and among these he raised grain even for the first season. One man in a day could deaden the trees on three or four acres of land. In a few years the storms felled the deadened trees. The huge boles by that time were very dry, so if four or five were rolled together, making a "log heap," they could be reduced to ashes in a few hours. In this way the primeval forest was cut away, and very little of the timber was utilized.

The pioneer's next duty was to fence a few of his fields for agricultural purposes. The cattle and horses were allowed to wander at large, browsing in the woodland, and the fences were to protect the growing crops from them. Bells were hung on the necks of the animals so that they could be found when needed, and that the farmer might know from the sound of the bell when they had broken into his fields. Bells were almost indispensable in a new unfenced country, yet they sometimes became instruments of danger. The prowling Indians occasionally, it is related, removed the bells from the domestic animals and, hiding behind bushes or in the dark ravines, by tinkling the bell induced those in search of the stock to approach and then sprang upon them unaware. The bells on animals were also said to be a protection against wild beasts, for rarely ever, according to pioneer tradition, would a wolf or bear attack an animal that wore a tinkling bell.

Corn, rye and potatoes were the principal products of the early farmers. They were very anxious to raise wheat, but had poor success in its culture, even in our present wheat-growing communities. They believed that wheat and rye could only be raised on high ground, and for that reason tilled the hills first. The more level tracts and richer river bottoms which afterward constituted the most productive farming land, were then too damp for wheat or rye, particularly the former. Furthermore, the rich bottom land was very prolific in the growth of weeds and briars and required much more labor to reclaim it than the higher ground.

Corn was largely used for bread, and by hunters and travelers in the form of "johnny cake," which for this reason was originally called "journey cake." The average garden of those days was a small affair. They raised their sage, from the leaves of which they made tea, used as a substitute for the tea of commerce. When Arthur St. Clair first moved his family to Ligonier, Mrs. St. Clair, who was a Boston woman of gentle birth, brought with her a chest of real tea. Many of her new neighbors had heard of it before, but had never tasted it. They came from near and from far to attend her tea parties. They enjoyed it so much that it was but a short time before it was exhausted. Coffee was a luxury, and the root bark of the sassafras, roasted chestnuts and roasted rye or wheat were all used as substitutes for coffee, so that the "cereal coffee" of today is not altogether modern.

Mr. White also describes at great length how the pioneers of many parts of northwestern Pennsylvania depended largely for meat upon the wild pigeon, turkey, deer, bear and other game, large and small, of which there seems to have been an inexhaustible supply. The hills and dales were full of wild fruits and berries (see notes on Indian agriculture appended to this chapter). Then there was the matter of clothing, ranging from the skins of animals to the "linsey-woolsey," a mixture of linen and wool, which had more warmth than "tow" garments and was less irritating than virgin wool. As late as 1825 calico sold for fifty cents a yard and silk dresses were museum pieces, to be displayed as prized possessions rather than something to be worn.

We turn to another and important side of the pioneer farmer's life—some of the sideline industries that contributed to his livelihood. Often the first paying crop of the agriculturalist was pot-ash. This material, which in spelling has long since lost its hyphen, was derived from wood ashes collected from the burning of trees in the clearing of the first farm. The newcomer leached the ashes he collected and then evaporated the "lye" to a solid mass which was commonly known and sold as "black salts." This was readily sold for three cents or more a pound in "cash money," while butter might bring only twelve cents a pound in trade. Often the only coin of the realm the tiller of the soil ever had in his hand came from potash and whiskey. The latter could be made from most anything that could be fermented, and a great many cabins had crude stills. Lye or potash had many uses in fertilizer, soapmaking, dyeing, tanning, glassmaking, gunpowder, and even in raising biscuits when in a

disguised form it appeared as "saleratus" in the country store. The demand for whiskey was equally great, both at home and abroad. Drinking was as respectable as going to a religious meeting, and there were no revenue tax complications. Whiskey was the most portable and potable form of grain and potatoes. One interesting feature of these two primitive farm industries is that they led to the establishment of "asheries" that relieved the original producer of much hard labor, and distilleries increased at a rapid pace for many years.

There were two other minor industries that engaged the attention of the pioneer farmer, the making of charcoal and the production of leather. Charcoal was light in weight, although bulky, but could be sold for many purposes. From the Indians came raw hide, which was tough, but stretched too easily and rotted quickly. The farmer with so many leather requirements had to learn to tan hides for durability. The charcoal kiln remained longer in northwestern Pennsylvania than in most regions; tanneries became big business. The grist and sawmill accompanied settlement. The numerous small and large streams furnished motive power with little effort or expense, and over a long period water power was the only one to be had. The gristmill was an indispensable necessity, and one of the first "neighborhood industries" to be established. Sawn lumber was so great an improvement over the log for buildings that any locality was ready to pool financial resources, if no individual came forward to build a sawmill. Thus the nucleus of hamlets, which later grew to city proportions, was a gristmill, sawmill, a tavern, store and frequently tannery, wagon, furniture and cabinet shops.

Horace Bushnell wrote of the "Golden Age of Homespun" as the two decades from 1820 to 1840. If this period could be extended another ten years, one might write of it as the golden age of agriculture in northwestern Pennsylvania. The primitive pioneering years of the turn of the century were coming to their end by 1850. A hundred new and improved tools eased the labor of the farmer. Plows, harrows, cultivators, planters and a long series of harvesting and threshing machinery had been invented that made grain growing easier and more profitable. McCormick patented a reaper in 1838; a threshing machine had been brought to western New York by a New Englander in the 1820s; a cultivator had appeared in 1840. The mowing machine was perfected just prior to 1830, although it had been patented in 1803, and the horse rake came into use in about 1830, both of which made hay a profitable crop. Neither then nor

since has any large part of the glaciated northwestern Pennsylvania counties been well suited to farm machinery, however much this affected its agriculture. We are not to infer from the above-mentioned mechanical advances that farming in the counties with which this chapter is concerned became soft and easy. Even in 1840 and 1850, or in later years, in many localities agriculture was largely a self-sufficing way of living, however improved the homes and barns and machines. Until the arrival of the "iron horse" (and through lines were built relatively late in railroad history), the rivers of this region did not provide adequate transportation facilities, roads connected settlements rather than gave access to large centers of population, and outside markets were few and for the most part distant.

Before taking a look at the agricultural situation in the northwestern Pennsylvania of the post-Civil War years, the discovery of petroleum, and the development of railways and good roads, let us take a last glance on what has been called the "Grain Period." As already indicated, the pioneers usually planted corn and wheat, the latter being the crop about which the original Middle Atlantic States had gone wild. Only sections of the northwest part of the Commonwealth were really well suited to important grains, but wheat and corn were in great demand, especially for export to foreign countries. The wheat fever subsided in the East, when the fabulous West with its vast areas of easily broken land became the granary of the Nation. By 1845 much of the wheat grown in the United States came from west of Erie, and after 1855 the growing of wheat had been definitely taken over by the Middle West, and after the Civil War the wheat fields extended more and more toward the setting sun. The same story might be written of corn production. It reached its high point in northwestern Pennsylvania, so far as mature grain is concerned, in the 1880s, although in the present century its planting for silo use has increased. Rye, oats, barley have held their own fairly well down the years, with buckwheat increasing at times in popularity, although it is a soil-depleting crop. The "Golden Age" which was also the wheat age has long since passed, but was splendid during the short period it lasted. The type of agriculture since then has changed markedly, becoming diversified, but centering in most of the twelve counties in northwestern Pennsylvania less on cultivated crops and more on dairying. This cannot be said without qualifications of the three westernmost counties of the region, nor of the two southernmost, which are dissimilar to the seven others.

In the intermediate era of agriculture in the northwestern counties, say from the end of the Civil War to the beginning of a new

century, farmers found that they must operate along different lines, making the change slowly and grudgingly, no doubt. It is no easy job to switch from crops for market to a scheme by which you feed those crops to animals and ship the perfected or more valuable product to market as milk products or fatted cattle, hogs and other animals on the hoof. Thousands of acres had to be taken away from the annual plowing and turned into pasture. In most instances this was a welcomed move, for it was the acres hardest to cultivate that were so used.

Live stock became the big word in this time and since—cows, cattle, horses, swine, sheep and chickens. Northwestern Pennsylvania never became a horse country, nor did it ever rise to heights as a beef cattle section. Sheep were increasingly grown prior to the outbreak of the Civil War, and then wavered until about fifty years ago, and have since declined. The horse, beef cattle and sheep industries followed the same course as that of wheat—the West, and foreign countries, notably Australia and the Argentine, proved to be strong competitors. Swine were raised in early times to consume excess crops and furnish high caloric food for the farmer and his usually large family. Even today they are incidentals, with their numbers becoming smaller than formerly. Since 1900 pig production has remained relatively static except for World War I years. A movement is now (1942) under way to increase the number of swine, but that is true of almost any agricultural product. Poultry from the small home flock has almost replaced the hog in the economics of farming. Since we first had Pennsylvania statistics of poultry in 1880, the number of chickens has increased in every decade and the figures for egg production have grown even more rapidly. Northwestern Pennsylvania not only raises more hens, but has learned how to make them lay.

One of the more notable changes in agriculture since the post-Civil War period, is the planting of fruits, especially the apple and the grape. The Indians liked the white man's apple well enough to plant trees in rude orchard form. Most pioneer farmers secured scions, seeds and seedlings from the East and introduced them in the home garden and farm. While there were orchards in Crawford County as early as 1818, it was not until the 1870s that horticulture engaged any large attention and not until near the end of the century was it a major interest in this part of the Commonwealth. Potatoes were an incidental crop until almost Civil War times. Up to 1890 the acreage increased, and since then has fluctuated. During the Civil

War, many dried "Yankee beans" were produced, and while the First World War raged, there was a marked revival of planting. Nowadays the string bean for canneries is important. Vegetable growing is confined to a few well-climated soil areas, such as the belt protected by the wide waters of Lake Erie, the vitaculture of which will be a later part of this chapter.

Unintentionally the compiler has carried the story of agriculture over into the modern or present period. Few statistics have been mentioned because they are so often misleading or difficult of application. From figures a case can be made against, or for, the agriculture of any region. Since 1900 there has been a retrogression in the number of cultivated acres; the number of farms has decreased; farmers are fewer; the zenith of fruit tree (apples) planting has passed; cultivated crops rank lower; and for the first third of the present century the incomes of northwestern Pennsylvania farmers were out of line with those of other occupations. An authority on agriculture, in writing of his own county, flatly stated:

"There are few farms in the county that are strictly self-supporting, and they are almost all specialized, that is, their activities are centered upon the production of one or two articles, such as fruits, truck, milk and butter. By a self-supporting farm is meant one that pays its way and produces a profit on its value after all expenses are paid, including the labor of the farmer, his wife and family. . . . The economists of the nation have long been discussing the problem of how to feed the people as they increase in numbers, but in our county where less land is cultivated than formerly, because it does not pay to farm it, the problem is how to make profitable use of this surplus land. Not only have the number of farms decreased in the present century, but the average number of acres actually being cultivated on each farm is much less. It seems that through the use of machinery and other better methods of production, especially in the great farming districts of the Mississippi Valley, less men and fewer acres produce more food than ever before, while increased transportation facilities bring these products into direct competition with the products of county farms, whose rougher aspect make the use of machinery, etc., less effective. Then, too, the demand for labor at wages higher than a farmer dares to pay and expect to make both ends meet makes it necessary for him to cut down his farm operations, as nearly all are doing,

or to give up the business entirely and enter the army of wage earners, as many have done. Though almost any farm in the county could not be bought for less than the cost of buildings and equipment, *very few* young people are going into the business because they are not satisfied to live within the income that it would provide and do the work that it would require for any kind of success. So there is the big problem of waste land."

The above, written a few years ago, was backed by a comprehensive group of statistics, and expressed results of personal investigation covering two decades. It was the dark side of the shield that he inspected, but he also presented some bright aspects of agriculture, such as: The progress of farming and progressiveness of farmers so that fewer men produced more wealth; that improved methods of production and organized marketing contributed to this progress; the selection of better seed, maintenance of soil fertility; the standardization of grades of products, coöperative buying and selling; more rapid transportation; more and wider disseminated knowledge; a higher standard of living and of intercommunication. In these respects the agriculture of northwest Pennsylvania, and of the Nation as a whole, has advanced more and faster during the first forty years of the present century than in any similar period in its history. This is true despite the agricultural depressions that followed, belatedly, the Spanish-American War and World War I, which in the latter case continued well on into the 1930s and was relieved by artificial respiration. The farmer still struggles along under the burdens of high land valuations, taxes, labor costs, increased competition from other industries, and the enlarged spread between producer and ultimate consumer. Somehow the farmer's dollar is not quite so valuable as that of the other fellow, and is the first to depreciate in purchasing power.

There have been two methods of benefiting agriculture employed; direct aid by the government, help rendered by the farmer himself. The Civil War was followed by a disruption of agriculture that had been customary prior to the internecine conflict. Out of the recognition of this condition came the Grange, oldest of national agricultural organizations, founded in Washington, District of Columbia, on December 4, 1867. In Potomac Grange, No. 1, the first ritual, much the same as used now, was introduced. The movement was taken up almost immediately in western New York and Pennsylvania. Although suspected of being political in

character, because it affected agricultural legislation, the Grange won recognition for progressive and powerful leadership along many lines of activity. It has always worked for the improvement of agriculture, and has fought valiantly for such things as the promotion of coöperation, good roads, rural free delivery and parcel post, woman's suffrage, farm legislation for the betterment of farm life, and many others.

Three counties make claim to having initiated the first county fair, each prior to 1820. This compiler will not attempt to decide the controversy; it is enough to say that by mid-century all but one of the counties were holding annual fairs, county or local, which were the main agricultural events of the year. They gradually were consolidated into the present system of county fairs. The influence of these events was very great, especially during the first half century of their existence. Farmers gathered to show the best of their crops and live stock; ideas were exchanged, new and improved seeds were exchanged, and the housewife proudly exhibited the products of her skill and labor.

Agricultural education may be considered aid by the State or the effect of farm pressure and leadership. Those who tilled the soil did not wait for colleges and schools to be established, they formed societies of which there are still many survivors, some of which, in practice, became agricultural, horticultural and animal husbandry schools, although not organized or chartered as such. The Pennsylvania State College was opened in 1859 and has since done exceptionally constructive work. It is maintained by Federal and State appropriations to carry out the terms of the Land Grant College Act. "Penn State" maintains a branch at DuBois, Clearfield County; the University of Pennsylvania presents some courses of value to the agriculturally-minded, in Erie. Across the border is a New York State School of Agriculture, at Alfred, and Buffalo offers a variety of departments. The so-called "short-course" in farming practices, production, management and economics is popular, and the high schools offer agricultural training.

The departments of agriculture, national or State, and the experimental stations, founded under the Morrill Act of 1862, the Federal Hatch Act of 1887, the Smith-Lever Act of 1914, and others, were responsible for extension work and the farm bureaus set up in every county, all contributing to both the academic and practical development of good farming, home economics and living. During more recent years there have been political and governmental actions taken

to give direct financial aid to farmers. Immense sums have been expended; there has been a large increase in the number of agencies, corporations, and bodies and ramifications beyond human understanding as yet. Opinion is divided as to the benefits derived from this undertaking, except on the fact that the mechanized agriculture of other regions has benefited more than the twelve counties of our part of the State.



High School, Kane

As this is being written, the United States has plunged into the second and more terrible World War of probably long duration. The farmers of America, together with all classes of people, have been called upon to do their best for both our land and other democracies. To this appeal northwestern Pennsylvania tillers of the soil have responded with all vigor, zeal and patriotism. For nearly a century and a half its agriculture, like a numerous-faceted stone, has been shaped and polished by intelligent and hard thought and labor. It will not fail in this emergency.

Cameron County—Number of farms, 165; percentage of tenancy, 4.2; acreage susceptible of cultivation, 4,779; acres under cultivation, 3,336; value of land and buildings, \$373,383 (1940 Census). Value of crops, \$74,860; value of live stock products,

including dairy, poultry and wool, \$77,230 (1939). Value of live stock, including poultry, \$93,040 (January 1, 1940).

Clarion County—Number of farms, 2,199; percentage of tenancy, 13.1; acreage susceptible of cultivation, 131,996; acres under cultivation, 105,269; value of land and buildings, \$8,348,959 (1940 Census). Value of crops, \$1,635,600; value of live stock products, including dairy, poultry and wool, \$1,415,320 (1939). Value of live stock, including poultry, \$1,732,490 (January 1, 1940).

Clearfield County—Number of farms, 3,530; percentage of tenancy, 11.9; acreage susceptible of cultivation, 124,449; acres under cultivation, 103,763; value of land and buildings, \$7,861,012 (1940 Census). Value of crops, \$1,216,400; value of live stock products, including dairy, poultry and wool, \$1,147,390 (1939). Value of live stock, including poultry, \$1,248,750 (January 1, 1940).

Crawford County—Number of farms, 5,596; percentage of tenancy, 11.5; acreage susceptible of cultivation, 278,290; acres under cultivation, 202,451; value of land and buildings, \$18,714,759 (1940 Census). Value of crops, \$3,645,960; value of live stock products, including dairy, poultry and wool, \$4,542,170 (1939). Value of live stock, including poultry, \$5,324,810 (January 1, 1940).

Elk County—Number of farms, 720; percentage of tenancy, 5.7; acreage susceptible of cultivation, 28,842; acres under cultivation, 22,116; value of land and buildings, \$2,374,800 (1940 Census). Value of crops, \$421,190; value of live stock products, including dairy, poultry and wool, \$450,090 (1939). Value of live stock, including poultry, \$396,830 (January 1, 1940).

Erie County—Number of farms, 4,503; percentage of tenancy, 11.4; acreage susceptible of cultivation, 203,700; acres under cultivation, 167,034; value of land and buildings, \$18,706,391 (1940 Census). Value of crops, \$4,126,090; value of live stock products, including dairy, poultry and wool, \$3,836,200 (1939). Value of live stock, including poultry, \$3,812,110 (January 1, 1940).

Forest County—Number of farms, 276; percentage of tenancy, 9.4; acreage susceptible of cultivation, 13,718; acres under cultivation, 8,640; value of land and buildings, \$720,490 (1940 Census). Value of crops, \$158,770; value of live stock products, including dairy, poultry and wool, \$166,690 (1939). Value of live stock, including poultry, \$202,740 (January 1, 1940).

Jefferson County—Number of farms, 2,356; percentage of tenancy, 9.3; acreage susceptible of cultivation, 121,810; acres under cultivation, 97,546; value of land and buildings, \$6,844,240 (1940

Census). Value of crops, \$1,530,440; value of live stock products, including dairy, poultry and wool, \$1,333,600 (1939). Value of live stock, including poultry, \$1,310,830 (January 1, 1940).

McKean County—Number of farms, 1,234; percentage of tenancy, 9.2; acreage susceptible of cultivation, 47,955; acres under cultivation, 33,281; value of land and buildings, \$4,542,126 (1940 Census). Value of crops, \$605,530; value of live stock products, including dairy, poultry and wool, \$908,900 (1939). Value of live stock, including poultry, \$815,000 (January 1, 1940).

Mercer County—Number of farms, 3,764; percentage of tenancy, 9.8; acreage susceptible of cultivation, 186,062; acres under cultivation, 146,423; value of land and buildings, \$14,952,329 (1940 Census). Value of crops, \$2,873,590; value of live stock products, including dairy, poultry and wool, \$3,291,660 (1939). Value of live stock, including poultry, \$3,756,840 (January 1, 1940).

Venango County—Number of farms, 2,294; percentage of tenancy, 12.4; acreage susceptible of cultivation, 106,932; acres under cultivation, 79,118; value of land and buildings, \$6,756,321 (1940 Census). Value of crops, \$1,000,050; value of live stock products, including dairy, poultry and wool, \$1,231,190 (1939). Value of live stock, including poultry, \$1,192,890 (January 1, 1940).

Warren County—Number of farms, 2,028; percentage of tenancy, 11.4; acreage susceptible of cultivation, 91,106; acres under cultivation, 57,608; value of land and buildings, \$6,071,363 (1940 Census). Value of crops, \$1,001,850; value of live stock products, including dairy, poultry and wool, \$1,731,690 (1939). Value of live stock, including poultry, \$1,540,750 (January 1, 1940).

The Grape Belt—That section of Erie County bordering on the great lake is known as the Grape Belt. Its sandy loam and water-thermal protection makes it exceptionally well fitted for the production of grapes and vegetables, particularly the tomato, so that in modern times, when juices have become so important a part of the diet of Americans, it is also referred to as the "juice belt." This comparatively narrow strip parallels Lake Erie from Chautauqua County, New York, through fifty miles of Pennsylvania into Ohio.

Viticulture has an exceptionally interesting history, for it has been practiced in most of the states of the Union, and in the East from Florida to Maine. It is a far cry from the "Richards' vineyards" on Long Island, of 1664, to grapes in Erie County. In 1818 Deacon Elijah Fay planted the first grapes in this area and laid the

foundations of important industries. The most planted variety, the Concord, was originated by Bull, in Massachusetts, in 1850, a chance seedling in the Concord town of Revolutionary War fame. The Niagara grape was discovered and introduced by Hoag & Clark, of Lockport, New York, in 1868. It was not until 1880 that the first carload of grapes grown in Erie and Chautauqua counties was sent to New York City.

Some authorities hold that so far as Erie County was concerned, the first viticulture experiment inaugurated in this section was in 1857, when William Griffith, Smith Hammond and a Dr. Avery planted an acre and a half each to the Catawba variety. Griffith was the true pioneer who demonstrated that not only the grape, hitherto considered too tender to be grown so far west and north, could be grown safely, but also showed how to ship and sell the fruit in the eastern cities. He introduced a paper or wood basket which, properly packed, sold for as much as seventy-five cents per carrier. Well selected bunches sold for as much as twenty-five cents a pound, and a genuine grape boom got under way. Only a limited amount of grapes could be disposed of in the fresh or raw state, so the bulk of the annual crop was made into wine. One of the first to engage in this latter-named business was the South Shore Wine Company, which, incidentally, was visited in 1865 by the United States Secretary of Agriculture, who made a speech extolling the qualities of lake shore wine and of viticulture. At first only one variety was planted largely. In 1866, Horace Greeley, of the "New York Tribune," advertised a prize of \$1,000 for an all-purpose grape, and the award was given to the Concord. The eminent editor's judgment was accepted in western Pennsylvania and New York, and more of that variety has been planted here down the years than any other kind, although the Catawba, the Isabella, the Delaware, and the Niagara, and several of the Concord type have had their day.

A history of the ups and downs of grape-growing in Erie County would serve no useful purpose. Before the turn into the present century grapes sold at the wineries for as low as eight dollars a ton and rose to as high as fifty dollars a ton. The story of viticulture is very much like that of horticulture: first, the discovery of the advantages of a certain section in the growth of some fruit; second, large profits to the pioneers in planting; then over-planting and production and heavy losses; third, coöperative movements and organizations which handled the product from tree, vine or bush, to the final disposal; or, as in Erie and Chautauqua counties, new methods of processing the fruit are found and installed.

In connection with the grape it was the discovery or invention of unfermented juice that saved viticulture in these sections. This was something new, exceptionally palatable, and highly recommended by physicians. It seems probable that grape juice started that trend to the drinking of the juices of fruits and vegetables that has grown to such enormous proportions in our country. One may credit Dr. Thomas B. Welch, then of Vineland, New Jersey, as the inaugurator of this trend, based on the fact that in 1869 he put up a few bottles of unfermented grape juice for use at the communion table of his church and developed a small business. In about 1890 he established the Welch Grape Juice Company, at Westfield, Chautauqua County, New York. There were others, such as M. B. Gleason, W. H. Bigelow, and several more who evolved processes of sterilization of grape juice in ways that would retain flavor, and bouquet, and produce a stable product. And all this was prior to 1900. Possibly only the making of lime juice for use on sea vessels is of equal antiquity; certainly the western Pennsylvania and New York grape juice industry was the forerunner of the vast variety of fruit and vegetable juices available to the public of today. As already mentioned, upper Erie County is also a large producer of tomato and other vegetable juices.

Indian Agriculture—During the past decade there has been a keen interest manifested by research historians, particularly of those connected with the Federal Government, in the study of farming methods of the Indians, the interest usually being confined to the Five Nations (Iroquois) of New York and their neighboring tribes north and south. During the present global war, Washington has taken time out to publish a brochure on "Indian Agriculture." The compiler of this chapter has not had the opportunity to read this publication, so must depend upon such recent authorities as Paul D. Orvis, William N. Fenton, and Philip Hedrick.

The chief contribution of the Indians to the settlement of the eastern United States was not their skill in the arts of wilderness warfare, but in food crops which saved the Pilgrims, the Dutch, and the Cavaliers from starvation. In New York and Pennsylvania the aborigine donated several new food crops to the white man. According to the religion of the Iroquois, there were three divine spirits, those of the squash (and pumpkin), the bean and the maize (corn). There were feasts, or celebrations of the planting, thanksgiving for growing weather, the green corn harvest, bountiful harvests, the maple festivals, and annual "thank yous" to Ha-wen-ne-yee.

It is well to recall that the aborigine had no worth while farm tools or domestic animals, except the dog. With the crudest of instruments they grubbed up space for their plantings, often putting a fish, the offal of animals or bones under their seed, and kept their corn, beans and squash cleanly cultivated until these were large enough to take care of their own fight against weeds. Says Orvis:

"They practiced seed selection, clean culture, the inter-planting of squashes and beans to better utilize space, and the drying and preservation of seed for planting and food. . . . In spite of the crudeness of Indian agriculture, early explorers and military expeditions reported tremendous stores of maize and beans in their villages."

Hedrick, in "A History of Agriculture," lists the following plants and their uses by the Indians as follows:

INDIAN FOOD AND INDUSTRIAL PLANTS

Common Name	Scientific Name	Part Used	Purpose
Artichoke, Jerusalem	<i>Helianthus tuberosus</i>	Tubers	Food
Beans, Common	<i>Phaseolus</i>	Seeds	Food
Corn, Indian	<i>Zea Mays</i>	Seeds	Food
Gourds	<i>Cucurbita Pepo</i> , var. <i>ovifera</i>	Fruits	Dishes, Cups, Etc.
Groundnut	<i>Apios tuberosa</i>	Tubers	Food
Leeks (Wild Onion)	<i>Allium tricoccum</i>	Bulbs	Food
Pumpkins, Various	<i>Cucurbita Pepo</i>	Fruits	Food
Squash, Cushaw	<i>Cucurbita maschata</i>	Fruits	Food
Squash, Winter	<i>Cucurbita, maxima</i>	Fruits	Food
Tobacco, Wild	<i>Nicotiana rustica</i>	Leaves and Stems	Smoking

NATIVE PLANTS USED BUT APPARENTLY NOT CULTIVATED

Common Name	Scientific Name	Part Used	Purpose
Arrow-arum	<i>Peltandra virginica</i>	Rootstocks	Food
Bayberry	<i>Myrica carolinensis</i>	Wax from Fruits	Candles
Bearberry	<i>Arctostaphylos Uva-ursi</i>	Leaves	Smoking
Beech	<i>Fagus grandiflora</i>	Nuts	Food
Birch, Canoe	<i>Betula papyrifera</i>	Bark	Canoes, Buckets, Etc.
Blackberries	<i>Rubus allegheniensis</i> and other spp.	Fruits	Food
Bloodroot	<i>Sanguinaria canadensis</i>	Roots	Dye
Blueberries	<i>Vaccinium corymbosum</i> and other spp.	Fruits	Food
Bulrushes	<i>Scirpus validus</i> and other spp.	Stems	Mats, Baskets
Butternut	<i>Juglans</i>	Nuts	Food
Cat-tails	<i>Typha latifolia</i> and <i>T. angustifolia</i>	Stems and Leaves	Baskets
Checkerberry	<i>Gaultheria procumbens</i>	Fruits	Food
Cherry, Choke	<i>Prunus virginiana</i>	Fruits	Food
Cherry, Wild Red	<i>Prunus pennsylvanica</i>	Fruits	Food

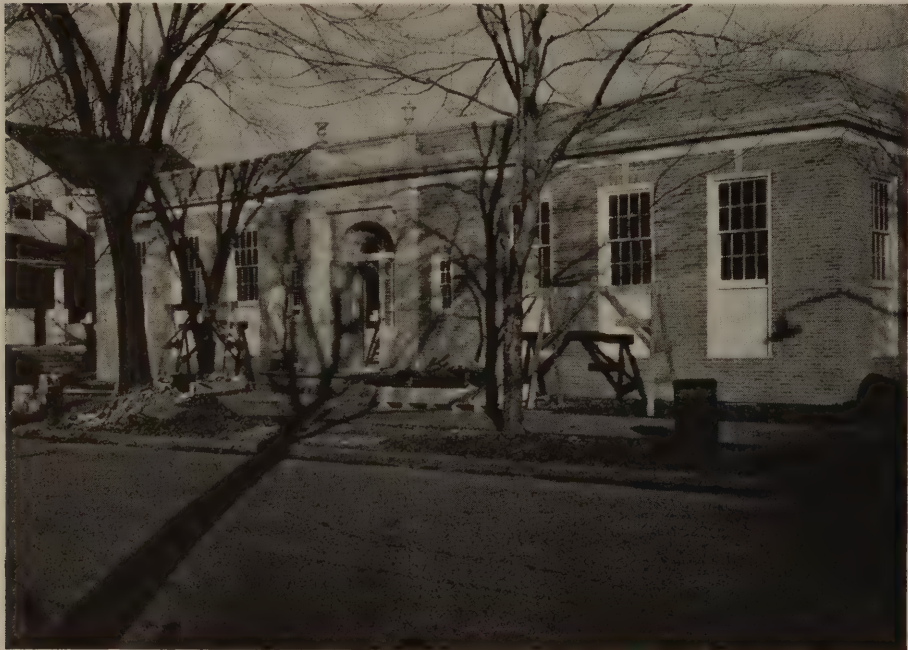
NATIVE PLANTS USED BUT APPARENTLY NOT CULTIVATED

Common Name	Scientific Name	Part Used	Purpose
Chestnut	<i>Castanea dentata</i>	Nuts	Food
Cranberries	<i>Vaccinium macrocarpon</i> and <i>V. oxycoccus</i>	Fruits	Food
Currants	<i>Ribes americanum</i> and other spp.	Fruits	Food
Dewberries	<i>Rubus flagellaris</i> and other spp.	Fruits	Food
Dogwood, Silky	<i>Cornus amomum</i>	Bark and Leaves	Dye
Dogwood, Flowering	<i>Cornus florida</i>	Roots	Dye
Dogwood, Red-osier	<i>Cornus stolonifera</i>	Leaves	Smoking
Elderberry	<i>Sambucus canadensis</i>	Fruits	Food
Elm, American	<i>Ulmus americana</i>	Bark	Withes, Nets, Etc.
Elm, Slippery	<i>Ulmus fulva</i>	Cambium Layer	Food
Golden-club	<i>Oronitium aquaticum</i>	Rootstocks	Food
Gooseberries	<i>Grossularia hirtella</i> and other spp.	Fruits	Food
Grapes	<i>Vitis labrusca</i> and other spp.	Fruits	Food
Grasses	<i>Hierochloe odorata</i> and others.	Stems	Baskets, Mats, Etc.
Hackberry	<i>Celtis occidentalis</i>	Fruits	Food
Hawthorns	<i>Crataegus tomentosa</i> and other spp.	Fruits	Food
Hazelnuts	<i>Corylus americana</i> and <i>C. cornuta</i>	Nuts	Food
Hickories	<i>Carya ovata</i> and <i>C. laciniosa</i>	Nuts	Food
Huckleberries	<i>Gaylussacia baccata</i> and other spp.	Fruits	Food
Indian Cucumber	<i>Medeola virginiana</i>	Rootstocks	Food
Indian Hemp	<i>Apocynum cannabinum</i>	Stems	Fiber
Indian Tobacco	<i>Lobelia inflata</i>	Leaves and Stems	Smoking
June, or Service Berries	<i>Amelanchier canadensis</i> and other spp.	Fruits	Food
Labrador Tea	<i>Ledum groenlandicum</i>	Leaves	Beverage
Maple, Sugar	<i>Acer saccharum</i>	Sap	Sugar and Syrup
Milkweed, Swamp	<i>Asclepias incarnata</i>	Stems	Fiber
Mulberry, Red	<i>Morus rubra</i>	Fruits	Food

New Jersey Tea	<i>Ceanothus americanus</i>	Leaves	Beverage
Oaks	<i>Quercus alba</i> and other spp.	Acorns	Food
Partridge-berry	<i>Mitchella repens</i>	Fruits	Food
Plum, Wild	<i>Prunus americana</i> and other spp.	Fruits	Food
Pokeweed	<i>Phytolacca americana</i>	Fruits	Dye
Puccoon, Hoary	<i>Lithospermum canescens</i>	Roots	Dye
Puccoon, Yellow	<i>Hydrastis canadensis</i>	Roots	Dye
Raspberry, Black	<i>Rubus occidentalis</i>	Fruits	Food
Raspberry, Red	<i>Rubus idaeus</i> varieties	Fruits	Food
Sassafras	<i>Sassafras variifolium</i>	Leaves	Beverage
Spicebush	<i>Benzoinaestivale</i>	Leaves	Beverage
Squirrel-corn	<i>Dicentra canadensis</i>	Tubers	Food
Strawberries	<i>Fragaria americana</i> and <i>F. virginiana</i>	Fruits	Food
Strawberry Blite	<i>Chenopodium</i>	Calves	Dye
Sumach	<i>Rhus glabra</i> and <i>R. typhina</i>	Fruits	Beverage
Sweet-flag	<i>Acorus Calamus</i>	Rootstocks	Food
Thimbleberry	<i>Rubus odoratus</i>	Fruits	Food
Walnut, Black	<i>Juglans nigra</i>	Nuts	Food
Wild Indigo	<i>Baptisia tinctoria</i>	Stems and Leaves	Dye
Wild Rice	<i>Zizania aquatica</i>	Seeds	Food
Wintergreen	<i>Gaultheria procumbens</i>	Leaves	Beverage

"Johnny Appleseed"—A very interesting character associated with the early history of western Pennsylvania was one John Chapman, popularly known as "Johnny Appleseed," concerning whom a Cleveland newspaper sometime ago published a story as follows:

"Johnny Appleseed, who traveled through Ohio in the early days planting apple orchards for the coming settlers, is regarded as the most eccentric figure in American history. He went barefooted not only in the summer but often in win-



(Photo Courtesy of "Clearfield Progress")

Joseph and Elizabeth Shaw Public Library, Clearfield

ter, wore as a coat a coffee sack with holes in it for his neck and arms, was frequently seen wearing a pan for a hat, thought it sinful to kill even a rat or a poisonous snake, was never without his Bible, endured pain as the most resolute stoic, and was loved by the settlers and feared by the Indians, the latter of whom would not harm him because they thought his mind was pathetically warped. Still, despite his queerness, by his extensive plantings of nurseries over the state, he performed a service to humanity not less beneficial than have been performed by many of our statesmen and scientists themselves."

There is so little known as to the exact facts about Johnny Appleseed that in his biographies there creep in fiction and imagination when endeavoring to tell of his life. Both Boston and a farm outside of Springfield, Massachusetts, claim him, but in the book by Henry A. Pershing—"John Chapman: Johnny Appleseed and His Time"—he names the farm as the place and May 11, 1768, as the date of his birth.

"The pioneer history of the West is rich in tales of heroism and brave deeds, battling with floods, fires and savages, with privations of all sorts, but, among them all, the name of Johnny Appleseed will always shine with a lustre peculiarly its own. For forty years or more he travelled this Western wilderness—Pennsylvania, Ohio, Indiana, Illinois, Michigan—homeless, in rags, often walking the stony pathways with tired and aching feet, replete with trials, self-sacrifice and suffering. He sowed that others might reap, he made the dreary settlements fragrant with apple blossoms and cheered many a homesick settler with his kindly deeds."

When he was born it was just about the time the apple blossoms were the most beautiful. As a boy he loved the out-of-doors and was a great lover of birds and flowers and this love remained steadfast through all his life. It is reported he attended Harvard College and was a brilliant student, and tradition has it that he received a degree. About 1788 he left for the West with a brother for Pittsburgh, and it is said they paddled up the Allegheny to see an uncle who lived near Olean, New York, and it was here that he became, what he termed himself, "an apple missionary." When they got to Olean they found their uncle had moved on to Ohio and had abandoned the farm. So the Chapman boys started to clean up the farm, and here on this farm Johnny chopped off hundreds of fruit shoots. Then and there his plan was to go to all the cider presses in that section—southern New York and western Pennsylvania—in winter and collect from the cider presses the pomace—the apple pulp which had been pressed—wash out the seeds, bag them, and then all the next spring and summer he sowed the seeds along the Allegheny River and its tributaries and in the meadows, and near the settlers' cabins, hoping that in after years there would be thousands of saplings for those who were settling up the West and would want fruit trees.

He worked for years in these sections, using his uncle's cabin near Olean for his headquarters, and sowed his seeds in every county. He

planted his nurseries along the Allegheny and its tributaries, and one of these tributaries was French Creek, where he sowed as far north as Conneaut Lake, near which he had a nursery of three acres in extent, which later supplied thousands of seedlings to farmers for twenty miles around. Continuing south, he had nurseries along the Muddy and the Yellow creeks in Butler County, and in Washington and in Fayette counties, and an especially fine one two miles out of Pittsburgh, where he had planted the seeds of apples, pears, peaches and plums as well as grapes. By this time he was well known all over southern New York and western Pennsylvania and eastern Ohio, and about this time John Chapman (his right name) became known as the Appleseed Man or Appleseed John and Johnny Appleseed. And about this time, also, a great change came over him, which was reflected in his personal appearance. Money was oftentimes so hard to get that he gave many of his trees to the poor who needed the trees but had no money, even trading his trees for old clothing, so that as a result he wore garments that were ill-fitting, faded, worn out and ragged; often his boots and shoes were misfits and quite frequently he had no foot gear, and so went barefooted, especially in the summer; when his hats wore out, he went bareheaded. As a rule he presented a very odd appearance, and folks regarded him as queer, but mentally he was always the same, sober, kind-hearted, self-sacrificing man that he had always been and eager to do a favor of any kind. To accent his sort of grotesque appearance he allowed his black hair to grow until it fell over his shoulders, but occasionally trimmed his beard; was about five feet nine inches in height, of rather slender build, quick in his movements, strong and supple; had dark blue eyes which sparkled with a peculiar brightness when in earnest conversation. He was a follower of Swedenborg and religion and apples were the two big things in his life, and on both these topics he was eloquent, using the best language and never at any time was he coarse or vulgar.

He lived in Pittsburgh for a number of years and then returned to Springfield for a short visit. There he had left a sweetheart, but, in a talk with her father, was told she was to be married to another. So, sad and sorrowful, he came back to Pittsburgh and started in sowing his seeds again and establishing new nurseries as well as looking after his old ones. These seeds were then sown along the shore of Lake Erie, along Elk Creek and Walnut Creek in Erie County and the north branches of French Creek. Then along the Conemaugh River as far as Johnstown, and down the Monongahela and the

Youghiogheny rivers, until he had planted scores of nurseries all over western Pennsylvania. Then he began his work of a similar nature in Ohio, sowing seeds along the Muskingum and its tributaries, the Tuscarawas, along the forks of the Mohican and in such counties as Huron, Wayne and Knox. Later he traveled over to New York and his sowing and planting work continued along the shores of Lake Ontario, especially in the counties of Niagara, Orleans, Wayne, and Monroe; then back to Ohio. Here he met his old sweetheart, who had moved with her parents from Springfield and who had never married and had always been loyal to him. Preparations for their wedding were made, but on the very day set for the wedding she died suddenly. Grief-stricken, he sought solace in his missionary work and for about seventeen years lived around Mansfield, Ohio, and from this center worked all over Ohio, as far north as Cleveland and Toledo and as far south as Columbus. He at times taught school, opening it every morning with a reading from the New Testament, followed by a short prayer and on Friday conducted the old familiar spelling-bee. He had a fine reputation as a scout and never carried a weapon in any Indian campaign, and served under General George Rogers Clark, General William Henry Harrison and General Anthony Wayne, and was well acquainted with Daniel Boone and other scouts of those days. He met Audubon, the naturalist, in Iowa, in 1843, and had met Lincoln a few times.

It is reported that Johnny Appleseed stated that the strangest sight he had ever seen in his travels was near Marietta, Ohio, where there occurred an unusual migration of millions of squirrels from the Ohio to the Kentucky side of the river. They could be seen crawling down the sides of the Ohio River by the thousands, massed together, covering a path probably five hundred feet wide. Three hours were consumed in the crossing, and old settlers have told how they devoured everything in their path as they passed over the land—corn, wheat, fruit on the trees. He also related of seeing near St. Marys, Ohio, an immense pigeon roost which was from four to six miles in circumference, and that they were like bees in a hive.

He seemed to command much respect among the Indians and went among them, always unarmed, with perfect safety. It has been related that he one time met a grief-stricken father and mother whose child had been carried away in an Indian raid and, promising to find and return the child to them, he disappeared and, a few weeks later, brought joy to the hearts of the parents, when he reappeared with the child, unharmed, in his arms.

The author has, from time to time, had several inquiries relative to land which Chapman was reputed to own in Venango County, but he has never been able to trace any such ownership.

He died in 1847, and over his burial place about two miles north of Fort Wayne was this simple inscription:

Born May 11, 1768
Died March 11, 1847

A Statesman and Agriculturist—Joseph Crocker Sibley, eldest son of Dr. Joseph Crocker Sibley, was born at Friendship, New York, in 1850. His father's death obliging him to give up a college course for which he had prepared, in 1866 he came to Franklin to clerk in Miller & Coon's dry goods store. From that time his business interests and Mr. Miller's were closely allied. He was agent of the Galena Oil Works at Chicago for two years, losing his effects and nearly losing his life in the terrible fire that devastated that city. His business success may be said to date from 1873, when he returned to Franklin. His accomplishment in the production of a signal oil superior in light, safety and cold test to any in use and a valve oil for locomotives, free from the bad qualities of animal oils, has already been related.

The Miller & Sibley Prospect Hill Stock Farm was one of the best equipped and most favorably known in the world. Different farms comprising the establishment included a thousand acres of land adjacent to Franklin and a farm with stabling for two hundred horses and the finest kite-track in the United States at Meadville. On one of these farms was the first silo built west of the Allegheny mountains. Trotting stock, Jersey cattle, Shetland ponies and Angora goats of the highest grades were bred. For Michael Angelo, when a calf six weeks old, \$12,500 in cash was paid to A. B. Darling, proprietor of the Fifth Avenue Hotel, New York City. Animals of the best strain were purchased, regardless of cost. In 1886 Mr. Sibley bought from Senator Leland Stanford, of California, for \$10,000, the four-year-old trotting stallion St. Bell. Seventy-five thousand dollars was offered for him a few weeks before the famous sire of numerous prize winners died. Cows that had broken all records for milk and butter and horses that had won the largest purses on the leading race tracks of the country were the results of the liberal policy pursued at Prospect Hill. Charles Marvin, a celebrated horseman, was superintendent of the trotting department and E. H. Sibley was manager of all of the Miller & Sibley interests. Prospect Hill Farm

was one of the interesting points in Franklin for visitors and the enterprise represented an investment of almost a million dollars.

Mr. Sibley not only was highly successful in business, but he also had a brilliant political career. He served five terms in Congress, where he was an outstanding leader. Every newspaper reader in the land heard of the remarkable congressional fight of 1892 in the Erie-Crawford District. Both counties were overwhelmingly Republican. People learned with surprise that Joseph C. Sibley, a resident of another district, had accepted the invitation of a group of citizens, by whom he was selected as the only man who could lead them to victory over the nominee of the ruling party, who had plenty of money, the support of the organization, extensive social connections, religious associations, he being a preacher, and a regular majority of five thousand to bank upon. Some wiseacres shook their heads gravely and predicted disaster. Such persons understood neither the resistless force of public sentiment nor the sterling qualities of the candidate for Venango county. Democrats, Populists and Prohibitionists endorsed Sibley. He conducted a vigorous campaign and multitudes crowded to hear and see a man candid enough to deliver his honest opinions with the boldness of "Old Hickory," as one writer has said. The masses knew Mr. Sibley's courage, sagacity and success in business, but they were unprepared to find so sturdy a defender of their rights. His manly independence, ringing denunciations of conditions of which he disapproved and his incisive logic aroused unbounded enthusiasm and he was elected by a sweeping majority.

Mr. Sibley's course in Congress amply met the expectations of his most ardent supporters. The prestige of his great victory, added to his personal magnetism and rare geniality, at the very outset gave him a measure of influence few members ever attained. During the extra session he expressed his views with characteristic vigor. A natural leader, close student and keen observer, he did not wait for somebody to give him the cue before putting his ideas on record.

He supported William Jennings Bryan in his first campaign and the author first met Mr. Bryan in the Sibley home in Franklin. In the silver discussion he bore a prominent part, opposing resolutely the repeal of the Sherman Act. His wonderful speech started the movement for those who declined to follow the administration program. The House was electrified by Sibley's effort. Throughout his speech of three hours he was honored with the largest congressional audience of the decade. Aisles, halls, galleries and corridors were densely packed. Senators came from the other end of the Capitol to listen

to the brave Pennsylvanian who dared plead for the white metal. For many years Mr. Sibley had been a close student of political and social economics and he so grouped his facts as to command the undivided attention and the highest respect of those who honestly differed from his conclusions. Satire, pathos, bright wit and pungent repartee awoke in his hearers the strongest emotions, entrancing the bimetalists and giving their enemies a cold chill, as the stream of eloquence flowed from lips untrained to flatter, to dissemble or to play the hypocrite. Thenceforth the position of the representative of the Twenty-sixth District was assured.

He took advanced ground on the Chinese question, delivering a speech replete with patriotism and common sense. He advocated the protection of the American workman from pauper immigration. He was the champion of American skill, American ingenuity, American labor and American wages. He approved of tariff for revenue, but not a tariff to diminish revenue or to enrich one class at the expense of all. The tiller of the soil, the mechanic, the coal miner, the day laborer found him an outspoken champion of their cause. His benevolence and enterprise reached far beyond Pennsylvania and it has been related that from hundreds of men he helped pecuniarily he never accepted a cent of interest. He served as mayor of Franklin, president of the Pennsylvania State Dairymen's Association, director of the American Jersey Cattle Club and member of the State Board of Agriculture.

Upon his retirement from public life in 1908, Mr. Sibley devoted his time to scientific agriculture. His residence, a palatial structure, located about three miles from Franklin on a high elevation overlooking the city and the Allegheny River flowing at the foot of the property, was surrounded by 1048 acres of woodland and cultivated ground. One of the most beautiful and attractive rides in the vicinity of Franklin especially when the mountain laurel is in bloom, is through this property.

The property is known as River Ridge and is still operated under the name of River Ridge Farm. The farmers of Venango and adjoining counties have benefited greatly from the operation of this farm. They have had opportunity to improve their stock and to learn without delay and expense the best methods of caring for them and getting the best results. Great advances have been made in the matters of seed testing, fertilizing, cropping and fruit raising. Thousands of plants have been sent out for testing, and when the war gardens were started during World War I, the plants were given freely to

all who would take them and use them. Land was also donated to be used for the supply of patriotic food.

For many years a yearly demonstration of methods was given. The farmers were invited to come and spend the day and the occasion was in the nature of a prophetic harvest picnic.

Several years ago, while the author was visiting with his friend, Dr. Maximilian Toch, the celebrated New York chemist, the subject of sugar became a matter of discussion and Dr. Toch related that he had collaborated with the United States Department of Commerce, National Bureau of Standards, in experiments leading to the production of levulose sugar and that the material used had been furnished by the Hon. Joseph C. Sibley, of Franklin.

In the present stage of development there are three sweet carbohydrates of vital importance as food, namely, dextrose (corn sugar), sucrose (ordinary sugar), and levulose. All have about equal food value. There is, however, a difference between them which is of fundamental importance.

Compared with sucrose, dextrose has a lower sweetening power, whereas levulose has a higher sweetening power. Therefore, if the cost of dextrose and levulose should be the same as or less than that of hard refined sucrose, man would have available, by mixing these two sugars, a sugar of any intermediate degree of sweetness desired. The per capita consumption of sugar has increased until this commodity is now rated as one of the necessities of life; and in addition, the world demands, except in a few instances, a chemically pure product for its sweetening. Thus, it is not surprising that there is a world consumption of approximately twenty-six million tons of a chemically pure product annually. The United States alone consumes over six million tons, one-half of which amount it is necessary to import from foreign countries, and only a little more than one-sixth of which is produced in continental United States.

Any sugar, to be marketed at a low cost per pound, must be produced by a method which permits its being crystallized from water solution. The National Bureau of Standards began its experimentation in this field by producing in quantity the sugar-alcohol, mannite, for the first time from water solution. This was accomplished on a considerable scale for the Field Medical Hospital Service of the United States Army during the First World War. Our previous supply of this indispensable substance had come from Germany, where it had been prepared by precipitation with alcohol.

Inasmuch as the world had long waited for a carbohydrate of high food value, great purity, low cost, and low sweetening power, the National Bureau of Standards' resources were next turned to the solution of the problem of producing hard refined dextrose on a commercial scale. The establishment of a large manufacturing industry presupposes the existence of an adequate supply of cheap raw material. With its enormous annual production of corn the United States had available in the form of starch an unlimited supply of a very cheap raw material suitable for the manufacture of a sugar. An exhaustive study of the crystallization of dextrose from water solution was carried out. This work resulted in the establishment of a new industry which has grown to large proportions. Some millions of dollars had already been spent by that industry in its efforts to produce low cost dextrose on a commercial scale. In 1919, after having furnished the research department of the Corn Products Refining Company with theoretical and technical information on the subject during the course of several years, and no successful commercial production having resulted, the bureau completed the theoretical and technical work necessary for the production of either the anhydrous or the hydrate form of the dextrose crystal at will. It then sent one of its staff members from the carbohydrate laboratory to the Edgewater, New Jersey, plant of the Corn Products Refining Company, where he soon threw down from water solution four thousand pounds of crystalline dextrose, and without the use of special equipment. It was thus demonstrated for the first time that it was perfectly feasible to produce chemically pure dextrose at a low cost on a large manufacturing scale.

The bureau continued the experimental work on a commercial scale, sending the above-mentioned member of its staff to the Edgewater plant, where experiments were made. The possibilities of commercial production of hard refined dextrose were so completely demonstrated by these experiments that the bureau was requested to design a semi-commercial plant costing approximately \$250,000. The purpose of this plant was to determine whether any unexpected difficulties would develop in the application of the process to large scale production. The design of such an experimental plant was undertaken and by the time the drawings were completed it was apparent that the bureau's process was applicable to large scale production. The Corn Products Refining Company immediately started work on a one and a half million dollar factory in connection with its Argo, Illinois, plant. This plant was put into successful operation within

a comparatively short time. Other factories have been built and are in operation in this country and in foreign countries. In addition a large hard refined dextrose plant producing the anhydrous form of the sugar exclusively was built and put in operation in North Kansas City, Missouri. As a result there has been developed a constantly expanding demand for hard refined anhydrous dextrose, especially for use as a raw material in the manufacture of medicinals and other products.

As the result of the bureau's work, other corn products refining companies, namely: Penick & Ford, Cedar Rapids, Iowa; Clinton Company, Clinton, Iowa; and the American Maize Products Company, Roby, Indiana, are producing hard refined dextrose. Dextrose has been vitally needed as an adjunct to the use of ordinary sugar. Satisfactory production in some large scale industries could not be made because of the lack of such a product. It was needed as the perfect carbohydrate "filler." It is also needed in the wine industries of Europe, and the Corn Products Refining Company built a large factory in Germany. All of this means an increased consumption of American corn, and since this tends to stabilize the price of cash corn, it is difficult to overestimate the value of the hard refined dextrose industry to the American farmer. This increased consumption has an importance much greater than the quantity involved because it is the excess crop which must be sold in foreign markets that unfortunately fixes the price of the entire crop. The dextrose industry gives promise of being a most important factor in the domestic disposition of the average excess corn production. Inevitably the dextrose industry will provide one of the most dependable outlets for our surplus corn. In appearance dextrose cannot readily be distinguished from ordinary granulated sugar and is on the market in three principal sizes of grain, namely, coarse, fine, and standard granulated. A bushel of corn (sixty pounds) produces approximately twenty-five to twenty-seven pounds of dextrose; five pounds of hydrol (molasses), one pound of oil, and twenty-seven pounds of feed.

One of the attributes of the crude dextrose (corn sugar) of commerce which originally interested the National Bureau of Standards was its low sweetening power. With its commercial production in the form of a granulated sugar it has been found necessary to revise existing ideas in regard to its relative sweetening power. If we arbitrarily give sucrose a rating of one hundred on the basis of its sweetening power, the best scientific study of the relative sweetening power of the common sugars gives dextrose 74.3, sucrose 100, and

levulose 173.3. Obviously such data, if applied to a specific individual, are necessarily approximate. While dextrose crystallizes in two different crystalline forms, the anhydrous and the hydrate, the latter having nine per cent. water of crystallization, it is the hydrate form of the hard refined sugar which is most largely produced commercially. Although accurate figures are not available, production in continental United States amounts to several hundred thousand tons annually. The sugar is perfectly stable with excellent keeping qualities. Theoretically it has an osmotic pressure higher than that of sucrose and should therefore exert a greater preserving action. The commercial uses to which hard refined dextrose is applicable are extensive and are increasing in number. Of these it is of interest to mention that the making of this sugar widely available commercially in pure form has resulted in its extensive use in medicine and especially in its use as a food in children's hospitals.

After the results with dextrose had been obtained and a large new world industry created, the National Bureau of Standards felt justified in turning its resources to an experimental study of the last of the three sugars mentioned herein, namely, levulose. If it could be proved that the large scale commercial production of hard refined levulose was practicable and feasible from an economic standpoint, some of the land now used for growing wheat would be utilized for growing tubers to produce levulose, and this would greatly lessen the importance and magnitude of the surplus wheat problem of the continental United States. It is this possibility that has been the principal actuating motive back of the bureau's investigations. Such a solution would be an ideal one for surplus crops.

The economic and commercial possibilities of levulose, could it be successfully crystallized from water solution, have long been given serious attention in Europe as well as in America. The creation of a large scale continuous flow process for the commercial production of hard refined levulose is, however, far more difficult than the similar problem encountered in creating the hard refined dextrose industry. In the case of dextrose there was an extensive scientific literature. In numerous instances the history of these experiments was of importance in the bureau's prosecution of the dextrose problem. Lines of attack that have proved to be unsuccessful served as guide posts, thereby eliminating much work which would have resulted from their repetition. In the case of levulose, however, although this sugar has been known scientifically for nearly a century, the literature in relation to its production was found to be practically nil. The bureau's

first publication on this subject was presented before the Ithaca, New York, meeting of the American Chemical Society the week of September 8, 1924, and carried the announcement that the National Bureau of Standards had developed a laboratory method for the successful crystallization of levulose from water solution. It is perhaps permissible to state that no development has occurred in many years which exhibits such potentialities for profoundly influencing man's food supply. The production of sugar is one of the world's largest industries. A new industry which gives promise of modifying the production, or even the distribution, of sugar is a thing of first importance to mankind.

Levulose is not only the sweetest; it is also the most soluble of all the sugars. It has long been scientifically the most fascinating and elusive. The human race consumes large quantities of it and of dextrose in honey and in syrup. Physiologically it is probably as easily assimilable as dextrose. Small amounts have been made by special chemical companies (by the use of alcohol) for scientific purposes, and also for use in dietetics. When ordinary sugar is eaten it is broken down into dextrose and levulose in order that it may become assimilable. Dextrose and levulose undoubtedly constituted the principal sugars upon which man developed as an animal. They are predigested. Sucrose is a new thing which has been added with the development of civilization. The first commercial production occurred only about six hundred years ago. Levulose corresponding in purity to that of hard refined dextrose or sucrose has always been so costly that it could be used only for scientific purposes. The bureau has succeeded in throwing down pure crystalline levulose from water solution. So far as their general appearance is concerned it is difficult to distinguish between the sugars levulose, dextrose, and sucrose in the hard refined or granulated form. The crystals of levulose are, however, more brilliant than those of any other sugar.

As a source of raw material for the commercial production of levulose the National Bureau of Standards has utilized most extensively the tuber of the Jerusalem artichoke. This plant is a native American weed which seems to survive the attacks of its enemies, grows well anywhere in the United States, produces from eight to twenty tons to the acre, and contains polysaccharides, which upon conversion, yield from ten to sixteen per cent. of levulose, estimated upon the weight of the tuber. It is cultivated about the same as corn—three times with the cultivator, if possible.

Through the generosity of Mr. Sibley, one thousand bushels of Mammoth French White Jerusalem Artichoke tubers were made avail-

able for the bureau's use. It was with this material that the first experiments on commercial levulose production were carried out. In addition, the availability of the carbohydrate, inulin, in the dahlia tuber was studied as a possible source of raw material. It was found that this tuber is probably intrinsically superior to the artichoke tuber as a source of levulose. Experimental work showed that it possessed less objectionable characteristics, especially impurities. However, no experiments have ever been made on the commercial growing



(Holmes Crosby, Architect)

Heard Memorial School, North East

of dahlia tubers for the purpose of producing the largest possible tonnage of sugar per acre. It is entirely conceivable, as has been frequently pointed out, that a dahlia tuber, high in inulin, hardy, and giving large tonnages per acre, might be developed. If this were done, it would, in the opinion of the bureau, be preferable to the artichoke as a source of raw material.

Approximately two hundred pounds of hard refined levulose were produced during the bureau's first crude experiments to discover a method suitable for large scale production. The far more difficult

problem of determining whether a continuous flow process suitable for commercial production was feasible was then undertaken. A pilot plant designed to produce in excess of a half ton of hard refined levulose daily was developed. This was a large undertaking owing to the fact that practically all equipment had to be especially designed and built. Very little commercial equipment was available or suitable for the purpose at hand. This work was continued for a number of years and a semi-commercial scale factory developed at the bureau was practically completed. As a result of the bureau's work, commercial production of hard refined levulose seems inevitable, but whether or not an important industry is developed depends upon whether a production method can be developed which will lower the cost per pound to a point where the sugar can be used on a large scale.

The bureau's work toward the creation of a levulose industry has been admirably supplemented by work of the Bureau of Plant Industry of the Department of Agriculture in developing improved types of tubers. The artichoke tuber seems to offer very great promise of selection to the end that a tuber can be developed which will give a greatly increased yield of sugar. There are thousands of varieties of the tuber growing wild on the American continent. Several hundred varieties have been collected and studied by the Bureau of Plant Industry. They have published Technical Bulletin No. 33, "The Jerusalem Artichoke as a Crop Plant"; Technical Bulletin No. 514, "Studies of the Culture and Certain Varieties of the Jerusalem Artichoke"; and Leaflet No. 116, "Growing the Jerusalem Artichoke."

A levulose industry to be of real value and a permanent success must be founded upon a process which will produce the hard refined sugar at a price to permit it to be readily sold. It is not a question merely of producing levulose. Everyone has been able to do that since the bureau's first successful experiments in 1924 in crystallizing the sugar from water solution. The bureau has repeatedly received offers from responsible parties and experienced sugar people to enter levulose production, but has declined to do so until it was felt that the data were obtained to make large scale industry possible.

The bureau had practically completed its semi-factory scale plant for the production of levulose when the necessity for government economy curtailed its funds in 1933. Prior to that time they had been greatly handicapped by the lack of suitable extraction equipment, which was essential to the securing of liquors of sufficient purity to permit of successful operation. They had been forced to use a hydraulic press for the extraction of the juice. The extraction

requires a diffusion process similar to that used in the beet sugar industry. They finally succeeded in designing and having constructed a special diffusion battery capable of performing the work and had it installed, when the curtailment of further experimentation came. Of course, it is not to be understood from this that the plant was perfected. Additional experimentation would undoubtedly develop the necessity for further modification, but they had developed for the first time all essential units for the first approximation to a complete experiment. It would probably require two years of additional experimentation to obtain with the bureau's semi-factory scale plant the additional scientific and engineering data needed for the design of a continuous flow large scale commercial plant, if such plant be possible, and to obtain approximate data on the cost of producing a pound of the refined sugar when operating on a large commercial scale. A considerable number of publications dealing with the bureau's investigation of the scientific and technical problems involved in the development of a method for the commercial production of hard refined levulose have been published which are available from the Superintendent of Documents, Government Printing Office, Washington, District of Columbia.

The author is indebted to the National Bureau of Standards for the technical information herein related and, under date of January 27, 1941, he received a letter from the bureau from which the following is quoted:

"Mr. Joseph C. Sibley, after his retirement as a member of Congress, coöperated with and aided this Bureau in its early research work in developing a method for the production of hard refined levulose. The sugar levulose is the sweetest and finest of all the sugars. For some years prior to this Bureau's work in this field, Mr. Sibley had been growing artichokes on a considerable scale at River Ridge Farm, Franklin, Pa. He became enthusiastic about the possibilities of this native American tuber and published a remarkable bulletin at his own expense dealing with the growing and value of the tuber as a vegetable and stock food. He supplied the National Bureau of Standards with a carload of tubers without any cost whatever to the Government; he even prepaid the freight. We are enclosing a copy of Mr. Sibley's bulletin.

"In 1933 this Bureau was compelled from lack of funds to cease its development work in producing a continuous flow process suitable for large scale production of levulose, using the Jerusalem artichoke tuber as the raw material. At that

time a semi-factory-scale plant had been practically completed at this Bureau. The National Bureau of Standards was interested in creating a new large-scale American industry; in other words, it desired to parallel the work it did when it developed the hard refined dextrose industry, using American corn as the raw material. We believe there has been a very considerable amount of research done on the use of levulose by diabetics. It is not the function of this bureau to express an opinion on matters relating to medicine."

The following is quoted from the bulletin published by Mr. Sibley:

"Several years ago the horticulturists of France, taking the Jerusalem Artichoke, greatly improved the tuber of this plant in size, color, flavor and prolific yield without apparently in anyway impairing its hardiness. While we are without any definite information, we believe it doubtless was secured by planting the seeds of the Artichoke as Burbank did the seeds of the potato. By this process the improved potato has been put upon the markets of the world. The improved Artichoke is known, and may be found described in Bailey's 'Cyclopedia of Horticulture' as well as in his 'Cyclopedia of American Agriculture,' as the Mammoth French White Jerusalem Artichoke.

"Many years ago we secured some tubers of this French variety of the Jerusalem Artichoke for our table use only. No vegetable obtainable during the winter months have proved more welcome to our table. We believe there will be no disappointed eater of the Mammoth French White Jerusalem Artichokes whenever they are properly cooked.

"No one should form the opinion that the Artichoke can ever, or ought to, replace the potato but, on the contrary, it is to be considered a valuable supplement thereto. The starch of the potato and the starch of the Artichoke is entirely different. The starch and sugar of the Artichoke appear in the form of 'inulin' and not as the starch and sugar of commerce. The sweetness of the Artichoke seems to be of a character that permits it to be eaten by those who are forbidden the use of starchy foods and many who are not allowed by their doctors to eat the potato can safely eat the Artichoke. It has been scientifically determined that those suffering from

diabetes have been able almost to double their consumption of carbohydrates through the use of the Artichoke tuber, and this without any appearance of sugar in the urine.

"Almost daily we receive letters from diabetic patients who have been recommended by leading medical experts to supplement their ordinary diet with the Artichoke tuber. Many of these letters are from children who state they have been able to eat their first sweets and expressing great delight with their marked improvement in health and happiness. As it is estimated that there are more than one million diabetics in the United States, if, as indicated, it is possible to increase the carbohydrate foods of diabetics by nearly 100 per cent., we are convinced that our experiments with the Mammoth French White Artichoke will be worth all the time, care and attention we have devoted to this subject during the last few years. During the last season we have made regular shipments of these tubers to Dr. Elliott P. Joslin of Boston, perhaps the foremost authority on diabetes, for testing on his patients.

"We have been able to keep our live stock in prime condition by feeding all classes of animals—horses, cattle, sheep, swine, dogs and poultry a liberal supply of Artichoke tubers each day from the late autumn until sprouting time in the spring. By feeding our poultry these tubers we maintained an output of eggs a year ago this winter greater by far than at any time in the past. The poultry expert from our State College came and spent a day at River Ridge Farm last winter and pronounced our coop of five hundred White Leghorns the best he had ever seen in the State of Pennsylvania, that he had never seen a flock of such perfect size and vigor or with so high a percentage of production, which indicated that our poultry had been well cared for. Our poultry were fed the raw Artichoke tubers all through the winter. We had previously hung cabbages up where they would have to jump to peck at them, but our results were in no way as gratifying as when the chickens were given the Artichokes.

"From experiences on River Ridge Farm, which are supported by testimony from other sources, we believe that the Artichoke when tested, will indicate that it is extremely high in vitamine contents. We do know that it is antiscorbutic. We had about determined to destroy one of our favorite

dogs because of a severe case of mange that did not yield to treatment after eighteen months of trial of standard remedies, but when we commenced to feed raw Artichokes he grew better day by day and in a comparatively brief time was free from all trace of mange and for the last two years he with our other dogs greedily devour two or three Artichokes daily.

"We believe that most of the diseases afflicting swine will disappear when these tubers are made an adjunct to their ordinary rations and that white corn fed to swine will be as desirable as the yellow corn.

"Observing the luxuriant growth of stalk of the Artichoke with its fine, delicate and abounding leafage, it occurred to me that the stalk as well as the tuber might be valuable. Therefore, cutting some of the green stalks, and at the same time cutting stalks of green corn, we placed them before our horses. Invariably the horses would leave the green corn fodder for the stalks of the Artichokes. We then tried them on our sheep and swine with the same results. Our few elk and buffalo seem to like them better than any other food we can place before them. Our cows in a few days after their first introduction to the Artichoke stalks would also leave their green corn fodder untouched. One of the most eminent farmers, as well as scientific agriculturists in the State of Illinois, writes that he lost a small patch of his Artichokes during the past summer because the cows got into it and ate every leaf and stalk. He states: 'The cows were running on an alfalfa and clover pasture and I had no idea they would like the Artichoke tops so well, but they seemed crazy for them and begged to be allowed to get into other fields of Artichokes.'

"We found the Artichoke stalks invaluable when fed to our milch cows as a soiling crop at a time when our pastures were burned brown. In nearly fifty years of breeding dairy cows we have never experienced such a long continued drouth as we have had during the past season and, excepting that we went into our fields and cut twice daily as many Artichoke stalks as our cows would eat up cleanly, we would have suffered greatly. In nearly fifty years of dairy work we were never able to maintain our June flow of milk through July, August and September until we commenced to feed the green Artichoke stalks to our dairy cows.

"The palatability of the Artichoke as compared with that of its relative, the sunflower, was surprising. When the sun-

flower with its rough stalk and extremely coarse fiber would be neglected, the Artichoke would be eaten with avidity. Unlike the sunflower, the Mammoth French Jerusalem Artichoke has a very fine leaf. Its foliage is profuse, and although the plant attains a height as great as twelve feet, it is bushy in its growth and the stalks of our ensilage range from one-eighth of an inch to one-half of an inch in diameter. Analyses of the stalks, leaves and tubers of the artichoke were furnished by the United States Department of Agriculture, Bureau of Plant Industry.

"Since the publication of my first article on the Artichoke, we have been compelled to modify greatly some previously expressed opinions. We have learned from experience that we cannot cut the green stalks and then expect an abundant yield of tubers. Like most plants the Artichoke gets a great supply of its nourishment from the atmosphere. An eminent agricultural scientist writes that he is convinced that it has a capacity for storing carbon to a degree found in but few other plants, and so when we repeatedly defoliate this plant in our pastures or by turning in our sheep when the plant is three or four feet high, it will not thrive.

"We believe the economic value of the Mammoth French White Jerusalem Artichoke will best be secured (and from this we judge from only practical rather than scientific knowledge) by planting with direct reference, first to ensilage and then the root crop which will develop and mature a month or two later; in fact, until the ground freezes solid we have found our tubers increasing in size. Second, for green forage to be fed to dairy cows when the pastures have become brown through a long continued drouth.

"We think the planting should be made from large and healthy tubers and that the smaller ones should be used for feeding to live stock. Our experience and observation prompts us to the belief that the spring planting is preferable, for the packing of the earth through the rains of winter will not leave conditions as favorable for the growth of the sprouts as will be afforded through the more mellow soil that is made possible through spring planting. Our suggestion would be through the winter to put manure on top of the soil and make your ground as rich as possible. In the spring, some little time before planting, use a light dressing of rock phosphate,

potash or nitrate of soda, or all three, but use it long enough before planting to prevent actual contact of tuber and fertilizer. We would advise planting one large uncut tuber in each hill, spaced 30 inches in the row, with rows 48 inches apart. Plant as you would potatoes. Give flat and shallow cultivation, but cultivate frequently until they grow too large to cultivate without injury. When the stalks get three to five feet high they will take care of the weeds and their dense shade will keep the soil from baking. We know few if any plants that respond to fertility and culture more adequately than the Mammoth French White Jerusalem Artichoke.

"Under soil and climatic conditions where the top soil is subjected to intense heat or prolonged drouth and the character such as not to retain easily its moisture, we would advise planting somewhat deeper than in regions where soil conditions are more favorable and frequent showers give adequate moisture. One gratifying feature of the Kansas reports is that the Artichoke resisted the drouth and the stalks stood fresh and normal with no tendency whatever to wilt while all other plants succumbed to the intense and prolonged heat.

"The Artichoke is a slow maturing plant. We have observed that through the summer months the tuber will continue to send out its roots and the tubers do not commence to form until after the rootage has become widely spread and well formed; this with us requires about four or five months' time, then when the roots are well grown the tubers commence to form and continue, as we have observed, to increase in size until they are dug in the spring. Seemingly the tubers absorb all the vitality in the abundant rootage until they are perfectly matured and part therefrom as a ripe cantaloupe parts from its vine when it has reached perfection.

"During the season of 1922, we planted in the rich sandy loam soil of our garden a test row of the Mammoth French White Jerusalem Artichokes. On October 17, 1922, we cut the stalks, which already had become partly defoliated by frost, from one hill and they weighed 14½ pounds and comprised upwards of 40 different branches growing from one fair sized tuber planted in each hill; and beneath that plant we dug from the hill 11 pounds of tubers. On April 28, 1923, we dug the balance of that test row and the product of one hill brought to my house filled a large galvanized iron water

bucket, heaped as high as they would stick thereon. The 60 tubers in that hill weighed 16 pounds net, and gave us an average weight of 4.2 ounces per tuber. Mr. Hanna, our manager, reported that other hills had given as high as 22 pounds to the hill, but the average weight of each hill was 15 pounds. Mr. Hanna brought to me two tubers dug from two other hills. On a carefully balanced letter scale the smaller one weighed 18 ounces and the other one weighed 26 ounces. These tubers were much larger than any ever before observed by me.

"This test seems to indicate that there are few if any plants known to me which to a greater degree respond more perfectly to a deep, rich, mellow loam soil and to careful tillage than the Mammoth French White Artichoke. The greatly increased yield under most favorable conditions seems to amply repay any additional labor or expense involved in the production of this tuber. As above stated, our observation prompts us to believe that these Artichokes do not reach their full maturity until they have parted from the roots, therefore, those that we are keeping for seed tubers we prefer to leave them attached to the roots and not dig until spring, believing that the perfectly matured man, animal or plant will produce the best progeny.

"One bad feature about the Artichoke is that the tubers will not keep in a dry place or in an ordinary root cellar, but they do keep perfectly where they are planted or by digging very late in the autumn and covering with a few inches of earth. Our method on this farm is to dig in the late autumn such quantity as we will wish to feed to our live stock or to use on our table during the winter, using our power potato digger. Gathering the tubers and placing them on top of the ground in long rows two or three feet wide and three or four inches deep, marking the ends of each row, we then plow furrows on either side of the rows and throw the loose earth over the tubers to a depth of three or four inches. No matter how deep the snow or how solid the ground is frozen, with a shovel to remove the snow we can easily break the frozen crust over the tubers and with a potato fork take the tubers out as we wish to feed them. We then take the tubers to our stables and place them in shallow tanks of cold water to remove the frost and feed them to our live stock the follow-

ing day; or if they are to be used on our table we bring them to our kitchen and place them in cold water a few hours before cooking. Dig Artichokes for winter feeding as late as possible in autumn, leaving balance for spring digging and planting. Repeated freezings in nowise injures the Artichoke tuber providing the frost leaves the tuber the same time it leaves the soil."

The exhaustive experimentation of Mr. Sibley with the artichoke created interest and experiments in many of the states, especially in the mid-West section and the value of the plant for purposes of stock feeding and for table use was demonstrated. It is also reasonable to believe that further scientific research and experimentation, perhaps by the National Bureau of Standards, may result in duplicating the success of the bureau in the establishment of commercial production of hard refined dextrose, thereby creating a large new world industry, by the accomplishment of the same end with levulose through the use of the artichoke as the raw material.

The valuable contributions* made to agriculture by Mr. Sibley in an entirely unselfish way were many and it was with Nation-wide regret that his death was recorded in 1926. The River Ridge Farm is still being operated by his daughter, Mrs. William McCalmont Wilson.

*Late in 1942, a number of manufactured products were being made from American artichokes, as the French White Mammoth Jerusalem Artichoke is now known in our country, but there was not one plant in the United States that could be utilized for the manufacture of alcohol from its tubers. Agriculturalists have offered the Federal authorities plans for the production of three billion gallons of alcohol that can be produced from the American artichoke. This alcohol could be utilized for the making of synthetic rubber, and also butyl, which is a basic material for the manufacture of explosives. The British Government is already making experiments along this line from the American artichoke.

CHAPTER XIII

Education

"We cannot say too often that public education exists primarily for the boys and girls of the community."—C. HERMAN GROSE.

Long after William Penn started his colony and had outlined provisions for the education of the children in Philadelphia, in fact more than a century later, scattered settlers in far off northwestern Pennsylvania were attacking the problem of the education of their children under comparable conditions. These post-Revolutionary War pioneers were almost as much isolated from cultural facilities as those of the sixteen hundreds who had migrated from a dozen European countries to dwell on the Delaware River. It was descendants of "foreigners" who moved on from the coastal colonies (recently become states) who were the settlers of what was then the "West," and they were as cosmopolitan in character as the Swedes, English, German, Scotch, Dutch, Irish, French, of Philadelphia and New York. New Englanders, whatever their origin, had already become homogeneous, individualists, and a "type" in the modern vernacular.

William Penn aimed to set up an Utopia in the New World. He was a visionary, a combination of the theoretical and the practical, but nevertheless an Oxford undergraduate, a scholar and gentleman. Philadelphia has become one of the educational centers of the Nation, but not because of the grandiose ideas and achievements of its founder, for back in 1683, about as far as schools had gone in the hamlet was one established by Enoch Flower, where one could send his boy to be taught to read English for four shillings; if taught to write English, it cost two shillings more; and Master Flower demanded all of eight shillings for teaching the art of "writing and the casting of accounts." For lodging and "diet" the expense mounted to ten pounds a year. One may smile at this picture of a school established two years after the founding of Philadelphia, but it was

very much after this pattern that education was begun in northwestern Pennsylvania.

New York City had four stages in its educational history: the Dutch period to 1664; the English period from 1664 to the beginning of the American Revolutionary period; the Revolutionary period, and the years since the formation of the United States. The first three periods contributed little that was significant in education. The various peoples followed the laws and customs of their home countries. One may write at length about the influences of



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the New England Pilgrims and Puritans of Massachusetts. The Puritans included many graduates of English universities among the early settlers, and were familiar with the advantages of general and higher education. Curiously, in new surroundings they established a religio-classic type of schooling, being chiefly concerned at the outset with educating youth of the wealthy or prominent for the professions, more specially the ministry. The government of the State was a sort of Theocracy, of which the clergy were the legislators and administrators of affairs; it therefore promoted a type of education that would provide an upper class to preach to and rule the colony and its offshoots. If this statement seems too strong and broad, the

following one is less controversial, namely: The church and the schools of old New England were closely allied, a comment that can be made of most of the American colonies. The minister was frequently chosen for any abilities he might have as an instructor of youth, and the church was often the first schoolhouse. It has been written that "when a New Englander found his way to some settlement in the wilds of the West, he immediately began to agitate, first, the building of a church and, second, of a tavern. The closer they were together, the better."

Public education, or "free education," as William Penn envisioned it, was seldom a reality until after the Revolution. Following this major event in our history the subsequent settlement of Pennsylvania frontiers was by a people keenly interested in the education of their progeny, even more so, some claim, than in religion. Common schools as distinguished from parochial schools were started before religious congregations were formed. These schools were set up and supported by the folk in the immediate vicinity. There was no unified system of supervision nor any standard curricula. There might be trustees or a school board, because many of the houses were built by local gifts of money, labor and materials, so that the school was a sort of community possession. As a rule, the parents of the pupils paid more or less by the month in proportion to their means or number of children. The length of the term and the qualities of the teacher were determined by the funds collected. Dr. Wickersham, in his "History of Education in Pennsylvania," comments:

"Such schools were at that day without precedent; they were established by the early colonists only from necessity; but as the people of different denominations, and of none, mingled more and more together, their sectarian prejudices and customs and exclusiveness acquired across the sea began to wear away, and they finally discovered that neither sect, nor class, nor race, need stand in the way of the cordial union of all in the education of their children. No movement in our whole history is of more significance than the process by which the neighborhood schools came to supply the educational needs of different communities, and frequently to displace other schools established on a narrower foundation, marking as it does the formation of a common bond of union and the moulding of the population into a common nationality."

McKnight, in his "History of Northwestern Pennsylvania," gives a description of one of the old schoolhouses in Jefferson County, which applies to nearly all of the schools of this early period in western Pennsylvania:

"The house was built of rough logs, and had neither window sash nor pane. The light was admitted through chinks in the wall, over which greased paper was pasted. The floor was made with puncheons, and the seats from broad pieces split from logs, with pins in the under side for legs. Boards laid on pins fastened in the wall furnished the pupils with writing desks. A log fireplace, the entire length of one end, supplied warmth when the weather was cold."

He also says:

"The act of 1809 made it the duty of assessors to receive the names of all children between the ages of five and twelve years whose parents were unable to pay for their schooling, and these poor children were to be educated by the county. This law was very unpopular, and the schools did not prosper. The rich were opposed to this law because they paid all the tax bills, and the poor were opposed to it because it created a 'caste' and designated them as paupers. However, it remained in force for about twenty-five years, and during this period the fight over it at elections caused many strifes, feuds and bloody noses."

Dr. McKnight further says:

"One of the most desirable qualifications in the early schoolmaster was courage and willingness and ability to control and flog the boys. Physical force was the governing power, and the master must possess it. Nevertheless, many of the early masters were men of intelligence, refinement, and scholarship. As a rule the Scotch-Irish master was of this class. Goldsmith describes the old master well:

" 'Yet he was kind, or if severe in aught,
The love he bore to learning was in fault.
The village all declared how much he knew,
'Twas certain he could write and cipher, too.
In arguing the parson owned his skill,
For e'en though vanquished he would argue still.' "

There are many stories extant of early education even down to its middle ages. At the risk of being repetitious but with the advantage of getting our story advanced into comparatively recent times, we relate a few details summarized from a book by Professor Thomas Lincoln Wall, an experienced educator and school administrator. The book shall go unnamed, because of the probability that some who read this chapter may infer that the author wrote of a small and backward county. In truth, it is one of the three largest in area and population



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in northwestern Pennsylvania and long has borne a reputation for being exceptionally progressive. As regards its school system it averages high among the western sections of the State not having large metropolitan centers.

Writing in 1925, Professor Wall draws attention to the fact that in that year more than twenty-five thousand pupils wended their way to schools each day, most by walking, and others by "train, trolley, bus and automobile." More than ten per cent. were attending high schools. A wide variety of subjects were offered, and four years

before, in 1921, the first consolidated school had been established in the county, an innovation of which he approved highly. More well educated and professionally trained teachers were being employed; school equipment and buildings had been greatly improved; and the usefulness of a county superintendent had come to be recognized.

On the opposite side of the shield were the large number of one-room schools still remaining in the county, where a single underpaid and relatively untrained teacher must instruct eight or nine grades of pupils. "There are yet buildings used for school purposes . . . too dark, too unsanitary and too inconvenient to be used as modern poultry houses." Too often the sanitary conditions were still very bad, despite the laws of the State. And there were other things, conditions that needed righting.

Let it be understood that Professor Wall was no pessimist; he had knowledge of the past, approved of much of the present, and had high hopes for the future. He also had made a study of the history of education in his county and recorded very interesting figures and facts, such as the election of the first county superintendent at a salary of \$200 annually, which that official said was not enough to feed his horse. Some school directors wanted the salary to be \$50, so that no one would accept the office. Professor Wall traced the advance from the "pay school" with its teacher who "boarded around" among his patrons; through the starvation wage of 1835 (when half the districts in the county refused to accept a law of that date that required public taxes in support of common schools), down through the years well into the present century when what the general educator received for limited months of service could not, by any stretch of the imagination, be called fair, concluding with a qualified approval of salaries paid at the year his book was published (1925).

The first county superintendent reported, in 1854, that of 4,893 pupils attending school, only twenty were studying history, 130 grammar, and 236 geography. Reading, writing and arithmetic to the "rule of three" were the popular subjects, with the spelling class being a highly prized adjunct. At that time, 1854, some seventy-five male and thirty-nine female teachers instructed the 4,893 pupils, and received wages ranging from eighteen to twenty-five dollars a month. The cost for each pupil per month was fifty-eight cents. In that same county the cost per pupil for the school year 1939-40 was \$68.10, which was the lowest average in the twelve counties of northwestern Pennsylvania, where the general average was about \$100 per pupil.

In this connection the comment of a New York educator is pertinent: "That county was getting more out of its \$68.10 than some counties in my State do out of a much larger expenditure."

Before proceeding further in this chapter it may be well to name a few of the laws upon which our present school system is based, at least those passed by the Pennsylvania Legislature after the settlement of northwestern Pennsylvania had been started. The Educational Enactment of April 4, 1809, provided for the education of the poor who suffered a severe handicap under the pay-for-your-sons-and-daughters-if-you-want-them-educated system of more than a century standing. While an advance in the right direction, the opponents of the law brought out its radical defect—that it applied only to the poor. Said one of these, at a much later date: "Let all fare alike (rich and poor) in the primary schools, receive the same elementary education, imbibe the republican spirit, and be animated by a feeling of perfect equality." Whatever its failings the Law of 1809 marked the beginning of our present free school system, and remained in force until April 1, 1834, and the establishment of "a general system of the education by common schools." While it was accepted almost unanimously by the Legislature, it was not popular in many localities in northwestern Pennsylvania, where there were many who, from Old World traditions, prejudices or plain ignorance, opposed "common" or free schools. There remained large groups who still believed in the church or parochial school, or one in which a pupil received only the amount of education that the parents paid for. Aristocracy and wealth distinctions had not died with the Revolutionary War.

A law of June 13, 1836, consolidated and amended several previous public school acts. It also permitted districts to establish or refuse common schools by plebiscite. In fact, it was not until 1848 that common or public schools were made compulsory. At the same time, and since, it was made possible for religious bodies and private individuals to set up schools operated according to their own ideas, and provisions have been made by the Commonwealth not only for their recognition, but for partial support or relief from certain obligations.

Under the 1873 Constitution of the Commonwealth of Pennsylvania, Article X, Education, states simply:

SECTION 1. The General Assembly shall provide for the maintenance and support of a thorough and efficient system of public schools, wherein all the children of the Commonwealth above the age of six years may be educated, and shall

appropriate at least one million dollars each year for that purpose.

SECTARIAN SCHOOLS NOT TO RECEIVE PUBLIC SCHOOL MONEY

SECTION 2. No money raised for the support of the public schools of the Commonwealth shall be appropriated to or used for the support of any sectarian school.

FEMALES ELIGIBLE AS SCHOOL OFFICERS

SECTION 3. Women twenty-one years of age and upwards shall be eligible to any office of school or management under the school laws of this State.

Upon so small a basis as the above Article X have been built the elaborate educational system and practices of the Pennsylvania free schools of today. Every so often the laws relating to this system are collated and clarified, such as the so-called "School Code" of May 18, 1911, to which there have since been many amendments, and in 1923 the "Administrative Code" was passed. What the laws are intended to accomplish, rather than the enactments, are important; and what our educators, whether in the field of instruction or administration do and try to do is the best commentary on the development of education. The latter ranges from the teacher in the one-room schoolhouse to the official in the State Bureau of Education.

Quoting from the exceptionally complete and comprehensive "Annual Report" of the largest school district in northwestern Pennsylvania, that of the city of Erie, submitted by Superintendent of Schools C. Herman Grose, in 1941:

THE PURPOSES OF EDUCATION IN AMERICAN DEMOCRACY

Three years ago the Educational Policies Commission of the National Education Association restated the Objectives of Education. Not since the Seven Cardinal Principles of Education were formulated in 1918 had a recognized revision been made. The new classification recognizes four great groups of objectives:

I—The Objectives of Self-Realization:

The Inquiring Mind	Health Habits
Speech	Public Health
Reading	Recreation
Writing	Intellectual Interests
Number	Esthetic Interests
Sight and Hearing	Character
Health Knowledge	

II—The Objectives of Human Relationship:

Respect for Humanity	Appreciation of the Home
Friendships	Conservation of the Home
Coöperation	Homemaking
Courtesy	Democracy in the Home

III—The Objectives of Economic Efficiency:

Work	Occupational Appreciation
Occupational Information	Personal Economics
Occupational Choice	Consumer Judgment
Occupational Efficiency	Efficiency in Buying
Occupational Adjustment	Consumer Protection

IV—The Objectives of Civic Responsibility:

Social Justice	Social Applications of Science
Social Activity	World Citizenship
Social Understanding	Law Obedience
Critical Judgment	Economic Literacy
Tolerance	Political Citizenship
Conservation	Devotion to Democracy

As a means of carrying out these objectives in the development of a program of public education for the boys and girls of Erie, certain policies have been adopted by the School District. . . .

There is a great reservoir of the history of education in northwestern Pennsylvania that cannot be tapped in a single chapter, even one of book length. Every single county could furnish interesting material. In the aggregate the subject bulks large, for education is truly big business in this corner of the Commonwealth, which incidentally comprises one-fifth of the area of the State, or more than nine thousand square miles. The twelve counties as a single unit cover more territory than either Connecticut, Delaware, Massachusetts, New Hampshire, New Jersey, Rhode Island, or Vermont. Clearfield County is only about seventy square miles smaller than Rhode Island. On the other hand the population of northwestern Pennsylvania is slightly less than three-quarters of a million people, one-fourth of whom are located in a single county, Erie. Hence there is, and always has been, the problem of providing enough schools, teachers and funds, particularly in rural districts. To the compiler this presents an insurmountable obstacle to the presentation of any detailed history of education as it has been made in the region as a whole or divisions.

At the close of the 1939-40 scholastic year there were 375 school districts in northwestern Pennsylvania, more than 170 high schools,

nearly 1,500 school buildings in use in which almost 5,700 teachers and administrators carried on their work with the enrollment of pupils numbering above 157,000. Total school expenditures for that year amounted to more than \$15,672,000; and the valuation of school properties totaled almost exactly \$405,400,000. These statistics spell big business in any man's language. And it should be noted that these statistics of the public schools do not include those of the five colleges, student centers of two large universities, several junior colleges, two teachers' colleges and many private schools. Education has not received adequate support during the last decade, and by some is held to be static or worse, but it is likewise true that education has reached splendid heights in our country, peaks of achievement that will be difficult to hold in time of war and during the aftermath of the present world conflict.

Breaking down the inclusive statistics of northwestern Pennsylvania into county parts, the figures for the school year, 1939-40, are:

Cameron County:

Number of districts, 8.
Number of high schools, 1.
Number of school buildings in service, 16.
Number of teachers and supervisors, 60.
Total enrollment, 1,372.
Average daily attendance, 1,234.
Value of properties, \$1,962,324.
Total expenditures, \$144,341.
Average expense per pupil, \$97.66.

Clarion County:

Number of districts, 36.
Number of high schools, 17.
Number of school buildings in service, 116.
Number of teachers and supervisors, 330.
Total enrollment, 9,108.
Average daily attendance, 8,014.
Value of properties, \$8,932,418.
Total expenditures, \$691,949.
Average expense per pupil, \$76.33.

Clearfield County:

Number of districts, 49.
Number of high schools, 18.
Number of school buildings in service, 242.
Number of teachers and supervisors, 749.
Total enrollment, 21,855.
Average daily attendance, 19,755.

Value of properties, \$15,423,522.
Total expenditures, \$1,549,623.
Average expense per pupil, \$68.10.

Crawford County:

Number of districts, 54.
Number of high schools, 27.
Number of school buildings in service, 184.
Number of teachers and supervisors, 549.
Total enrollment, 14,488.
Average daily attendance, 12,603.
Value of properties, \$36,343,705.
Total expenditures, \$1,557,484.
Average expense per pupil, \$92.38.

Elk County:

Number of districts, 13.
Number of high schools, 12.
Number of school buildings in service, 40.
Number of teachers and supervisors, 256.
Total enrollment, 5,532.
Average daily attendance, 4,965.
Value of properties, \$8,246,745.
Total expenditures, \$562,525.
Average expense per pupil, \$81.13.

Eric County:

Number of districts, 40.
Number of high schools, 26.
Number of school buildings in service, 224.
Number of teachers and supervisors, 1,250.
Total enrollment, 33,735.
Average daily attendance, 29,620.
Value of properties, \$163,292,677.
Total expenditures, \$4,012,663.
Average expense per pupil, \$107.48.

Forest County:

Number of districts, 9.
Number of high schools, 3.
Number of school buildings in service, 21.
Number of teachers and supervisors, 55.
Total enrollment, 1,272.
Average daily attendance, 1,103.
Value of properties, \$1,598,874.
Total expenditures, \$120,419.
Average expense per pupil, \$105.73.

Jefferson County:

Number of districts, 35.
Number of high schools, 13.
Number of school buildings in service, 169.
Number of teachers and supervisors, 449.
Total enrollment, 12,523.
Average daily attendance, 11,320.
Value of properties, \$18,350,813.
Total expenditures, \$1,021,557.
Average expense per pupil, \$72.91.

McKean County:

Number of districts, 22.
Number of high schools, 11.
Number of school buildings in service, 64.
Number of teachers and supervisors, 458.
Total enrollment, 12,331.
Average daily attendance, 11,070.
Value of properties, \$41,467,936.
Total expenditures, \$1,513,104.
Average expense per pupil, \$104.48.

Mercer County:

Number of districts, 48.
Number of high schools, 16.
Number of school buildings in service, 204.
Number of teachers and supervisors, 776.
Total enrollment, 23,192.
Average daily attendance, 20,126.
Value of properties, \$55,463,444.
Total expenditures, \$2,202,577.
Average expense per pupil, \$82.72.

Venango County:

Number of districts, 31.
Number of high schools, 17.
Number of school buildings in service, 126.
Number of teachers and supervisors, 469.
Total enrollment, 13,415.
Average daily attendance, 11,828.
Value of properties, \$34,826,294.
Total expenditures, \$1,405,732.
Average expense per pupil, \$83.14.

Warren County:

Number of districts, 30.
Number of high schools, 10.
Number of school buildings in service, 90.
Number of teachers and supervisors, 295.

Total enrollment, 8,880.
Average daily attendance, 7,938.
Value of properties, \$19,491,159.
Total expenditures, \$890,329.
Average expense per pupil, \$93.89.

*Totals for the Aforesaid Twelve Counties of
Northwestern Pennsylvania:*

Number of districts, 375.
Number of high schools, 171.
Number of school buildings in service, 1,496.
Number of teachers and supervisors, 5,696.
Total enrollment, 157,703.
Value of properties, \$405,399,911.
Total expenditures, \$15,672,303.

Although it is impossible within the compass of a few thousand words to give any adequate account of the educational progress of any one county, it should serve some good purpose to offer certain features of the development of education in the public schools of the city of Erie. Such a story throws some light on education in general in northwestern Pennsylvania, and especially indicates how the metropolis of the region worked out its own problems and at the same time set an example to other communities. Fortunately, C. Herman Grose, exceptionally able superintendent of the Erie city schools since 1935, has placed in the hands of the writer "The Brief History of the Public Schools of the City of Erie," compiled by a former assistant superintendent of the Erie schools. We follow almost verbatim such parts of this very comprehensive study of the Erie school system, as will serve the purpose of this chapter. Only for brevity do we fail to reprint in full this excellent history.

When William Penn provided a frame of government for the Colony of Pennsylvania, he declared that "wisdom and morality must be carefully propagated by a virtuous education of the youth," and that both Governor and Councils should "erect and order public schools." Various endowments were given by the State to colleges and academies, but the idea of "common schools" open alike to rich and poor, and supported by public expense through a system of equal taxation was very slow in winning the approval of property owners. "Pay schools," in which the children were trained for a moderate tuition charge were common, and academies flourished in almost every district having sufficient population.

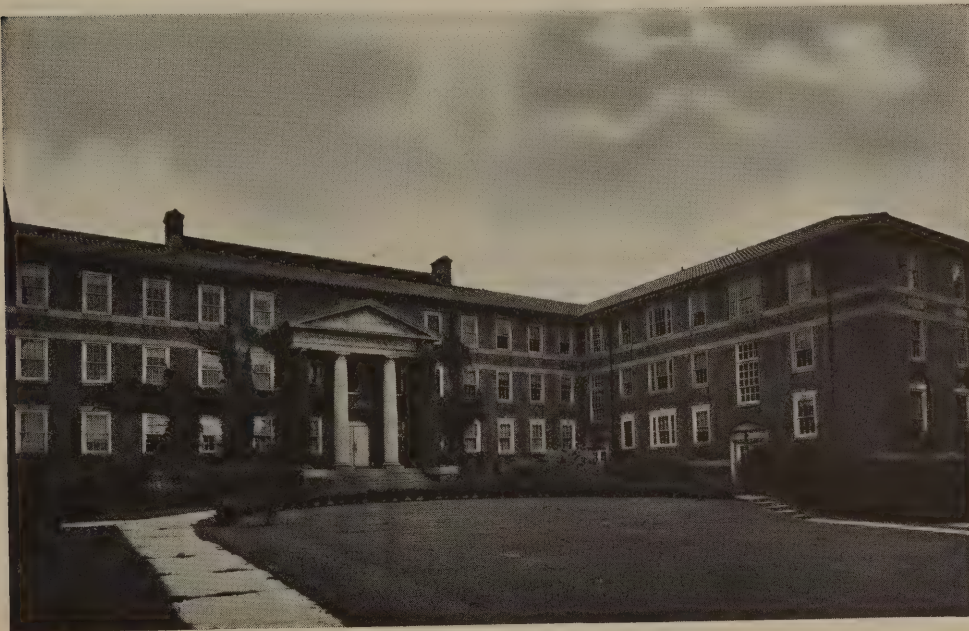
The so-called primary schools in Erie County up to the time of enactment of the Public School Act of 1834 were all of this char-

acter. The first records of schools established in Erie County indicate that the first school was started in Waterford about 1800; in Manchester, near Fairview, in 1804, and in Erie in 1806.

In 1871, William H. Brown, Esq., president of the Erie School Board, gives a brief history of the earlier public schools in the following article:

"In preparing this, the first detailed report of the Public Schools of the City of Erie, it has been thought proper to preserve some of the most interesting facts of their history.

"The present school system was inaugurated in the year



Calflisch Hall, Allegheny College, Meadville

1834, under the leadership of Thaddeus Stevens, and made more liberal and effective in 1854. Commencing with the year 1806, schools were maintained in part by contributions from the citizens; in that year the first school house was erected in Erie. It was placed on the lot at the corner of Seventh and Holland streets, where the present school house No. 2 stands. It was a hewed log-house, one story high, about 18x22 feet. It was built by John Greenwood for the contract price of \$30, which was paid by contributions from the citizens. At that time it stood in the forest, and there was only a foot-path to the school from the village, as it then existed, with its one

hundred inhabitants, in the vicinity of German Street below Fourth Street.

"Mr. Anderson was the first teacher, and was at the same time the only Justice of the Peace in town. He was succeeded as teacher by Mr. Blossom and by Dr. Nathaniel Eastman who taught the school in the year 1812. Mr. Eastman has preserved the roll of pupils that attended this school in that year. Some years since, he forwarded a copy of this roll, together with his likeness, which has been framed and placed in the High School. This roll is the oldest in preservation. . . .

"The town lot referred to, on the corner of Seventh and Holland streets numbered 1378, was bought from the State, August 4, 1804, by James Baird, for the sum of \$25. It was afterwards paid for by contributions from several citizens, collected by Capt. Daniel Dobbins, and was patented in the name of the 'Presque Isle Academy.' This name appears to have been informally given by the contributors, as no record can be found of a corporation having been formed by that title. The lot has been occupied for school purposes continually up to this day.

"At the time of the enactment of the school law in 1834, the School Directors of the entire County met in convention with County Commissioners and determined the amount of school tax to be raised. The law then provided that, in addition thereto, the directors of each town would call a meeting of the citizens who by vote were authorized to say how much additional tax, if any, should be collected from the town. The first of these public meetings in Erie, was held at the Court House, November 22, 1834; it was presided over by Dr. Wm. Johns, Wm. Kelley acting as Secretary. On motion of E. Babbitt and Geo. Kellogg, it was determined to raise \$1,000 as additional tax for that year. The next year it was determined not to raise any sum of money in addition to that provided for by the County Convention. The law was then amended, leaving the whole question of taxes with the school directors. On the 7th of September, 1836, on the recommendation of the Committee, (E. Babbitt, John A. Tracy and Smith Jackson,) the borough of Erie was divided into four sub-districts—Sixth and Peach streets being the dividing lines.

"In 1837, four school houses were built of wood, at a cost of \$310 each, on leased ground, the directors at that time determining that it was better to lease than to purchase ground. There were at this time in attendance at the school as pupils 160 males and 180 females.

"The text-books adopted were Cobb's Spelling-Book, Goodrich and Parley's Geographies, English Reader, Kirkham's Grammar and Daboll's Arithmetic. These old standard books—the steady companions of many generations of boys and girls—had to give way in the year 1850 to new books by later authors. In 1851, coal was used for fuel in place of wood, and clocks were introduced into the school rooms.

"The first public examination of the schools was held May 8, 1849, and the Rev. Dr. Wm. Flint delivered an address suited to the occasion.

"In the year 1844, it becoming apparent that the then existing small wood-buildings were inadequate to the wants of the schools, lots of grounds were purchased, a new plan of buildings was adopted, and in the year 1848, two large brick houses were built, one of which is the present school house No. 1 and the other was erected where No. 2 now stands. These houses were opened for school January 12, 1849, and the wooden buildings sold. In 1855 and 1856, the present school house No. 2 was commenced, and opened for school October 1860. No. 3 was built, since which time we have been continually adding, until we have now seven first-class and six second-class houses, and are building a large house on the corner of Eleventh and French streets, to take the place of rented rooms that are crowded, and to provide for that thickly populated portion of the city.

"Although we now (1871) have accommodations for over 3,000 pupils, and school property owned by the city valued at nearly \$190,000, we are by no means in advance of present wants. We must continue to add to our present accommodations in order to meet the increase of population in our rapidly growing city.

"In July, 1865, the Board, feeling the necessity of a more perfect system in the management of the schools, elected Mr. H. S. Jones, who had been for a long time Principal of the West Ward schools as principal teacher of all the schools,

to perform the usual duties of a school superintendent. Mr. Jones filled the office of principal teacher up to June, 1867, when he was elected City Superintendent under the Act of 1867, enabling the directors of cities and boroughs of 10,000 inhabitants, and upwards, to elect a city superintendent.

"By means of the city superintendency we have been enabled to secure a more uniform system of teaching in our schools, and to make them in all respects more efficient. Under his management they have gained a high rank, and in some respects, we think, they excel in many of the larger towns. . . . "

In 1844, the Borough of Erie was divided into two wards known as the East Ward and the West Ward, each having its own board of six members. In 1848, when the four small buildings were abolished, two five-teacher buildings were erected at Seventh and Holland and Seventh and Myrtle. In June, 1854, a new law became effective, creating three boards known as the East Ward, West Ward, and a union of the two known as the Board of Controllers. This was continued until 1870, when a special Act was passed creating the School District of the City of Erie.

The first reports of the Board of Controllers of the Schools of the City of Erie were issued in 1861-62. The schools were divided into three departments, named as follows: Primary, Intermediate, and Grammar School.

We find under Rules and Regulations of pupils some very interesting and informative regulations, among which may be quoted the following: "Each scholar shall be responsible for the neatness of his or her person and of the seat or desk with the floor nearest thereto which he or she may occupy." "Every scholar coming to school without proper attention having been paid to his or her person in respect to cleanliness or whose clothes are not properly repaired, shall be sent home by the Teacher." "Any pupil who has not the proper books and utensils for study, shall not be permitted to attend the schools." "Whenever the example of a pupil becomes injurious and reformation appears hopeless, the parent or guardian shall be requested to withdraw such pupil from school."

We find among other things in the courses of study for the Primary school the following instructions: "H Class—Reading on Cards; Miscellaneous Oral Instruction and Drawing on Slates." "G Class—Reading on Cards and from First Reader, and Printing

Words on Slates; Oral Instruction, First Reader commenced." "F Class—Reading, Counting and Adding orally taught; Printing Words and Drawing on Slates; Oral Instruction upon familiar subjects." "E Class—Reading, Oral Arithmetic and Geography, Drawing and Printing continued, Oral Lessons on Common Subjects." "D



Recitation Building, The First College Building, Grove City College

Class—Reading, Oral Arithmetic and Geography continued, Drawing and Printing continued, Oral Lessons on Common Subjects." "C Class—Reading, Oral Arithmetic and Geography continued, Oral Lessons on Common Subjects, Drawing and Printing continued." "B Class—Reading, Oral Arithmetic and Geography continued, Drawing and Printing continued, Oral Lessons on Common Subjects."

"A Class—Reading, Oral Arithmetic and Geography continued, Drawing and Printing continued, Oral Lessons on Common Subjects."

This is quite typical of the earlier courses of study carried on in the grammar schools, and we find that in the intermediate schools the highest reading was found in the third reader.

In the report of Superintendent of Schools H. S. Jones, for 1866-1867, he indicated that five buildings were then found in the city of Erie; Numbers 1, 3 and 4 in the West Ward, and Numbers 2 and 5 in the East Ward. "The buildings, No. 3, No. 4, and No. 5, recently erected, are surrounded by commodious grounds, and in general appearance and fitness are a credit to the spirit and enterprise of the local boards." The following statement was made regarding teachers: "The whole number of teachers employed by the board during the 'school year' is 47; males, 4; females, 43. Average number employed, thirty-three and four-fifths." Some taught only a few weeks. Tracing the various reports down through the years, we find most interesting sidelights on the history of our schools.

In the summer of 1874 a normal class consisting of teachers of the schools and those desiring to teach was organized and continued during the morning for five weeks. Forty-five were in attendance. Miss A. C. Kilbourne, vice-principal of the high school, acted as instructor.

"During the fall term (1874-75), Nicholas Bohnen, teacher of German in No. 11, first primary, was allowed to spend a part of each day in the teaching of a number of mute pupils by the articulation method. His success was such as to attract considerable attention and a school for deaf mutes was kept up during the year and it was demonstrated that deaf mutes can, by patient and ingenious instruction, learn to speak with a degree of correctness and fluency very acceptable."

In 1876-77, the tuition in the mute school amounted to \$661.78. A school for colored pupils was started in rented quarters, but was soon abandoned due to poor attendance.

In 1872, the enrollment in the public schools was 270 pupils fewer than in 1871, and it was explained that it was "due to smallpox which had troubled the schools more or less during the year."

Starting in 1867, tuition evening schools were conducted, at first for mechanical drawing with arithmetic and oral expression added

later, in buildings Nos. 2, 8 and 10. These continued through the 1870s.

In 1874, drawing was introduced as a regular exercise in the Erie public schools.

Records speak of two German schools which were well attended. The interest was so keen that, in 1877, German was introduced in the program of studies in elementary schools Nos. 2, 3, 4, 6, 7 and 15, and continued in the elementary schools until 1918.

In 1884, a building was rented for the purpose of conducting a school for mechanical drawing and held both day and evening sessions. This was the introduction of mechanical drawing as a regular subject.

In 1883, School No. 16, the present Longfellow School, was opened.

In 1889-90 there were 490 enrolled in night schools from eleven years of age up. The subjects desired were reading, writing, arithmetic and spelling. A few wanted grammar and history. There were 119 foreigners enrolled who could neither read nor write the English language. The school was open eighty nights.

On February 11, 1895, the six-room No. 4 School at Fifth and Chestnut burned, which was later replaced by the first unit of the present Burns School before the addition was made as authorized in 1926.

The free textbook law of 1893 was fulfilled in Erie in 1893-94 by the purchase of books to the amount of \$11,695.80.

Erie has the high honor of drawing up the first law permitting boards of education to organize and set up public libraries. Erie was the first city to organize such a public library within the school district. The corner stone of the Erie Public Library was laid on June 7, 1897, the building was completed and accepted July 7, 1898, and it was dedicated on February 16, 1899.

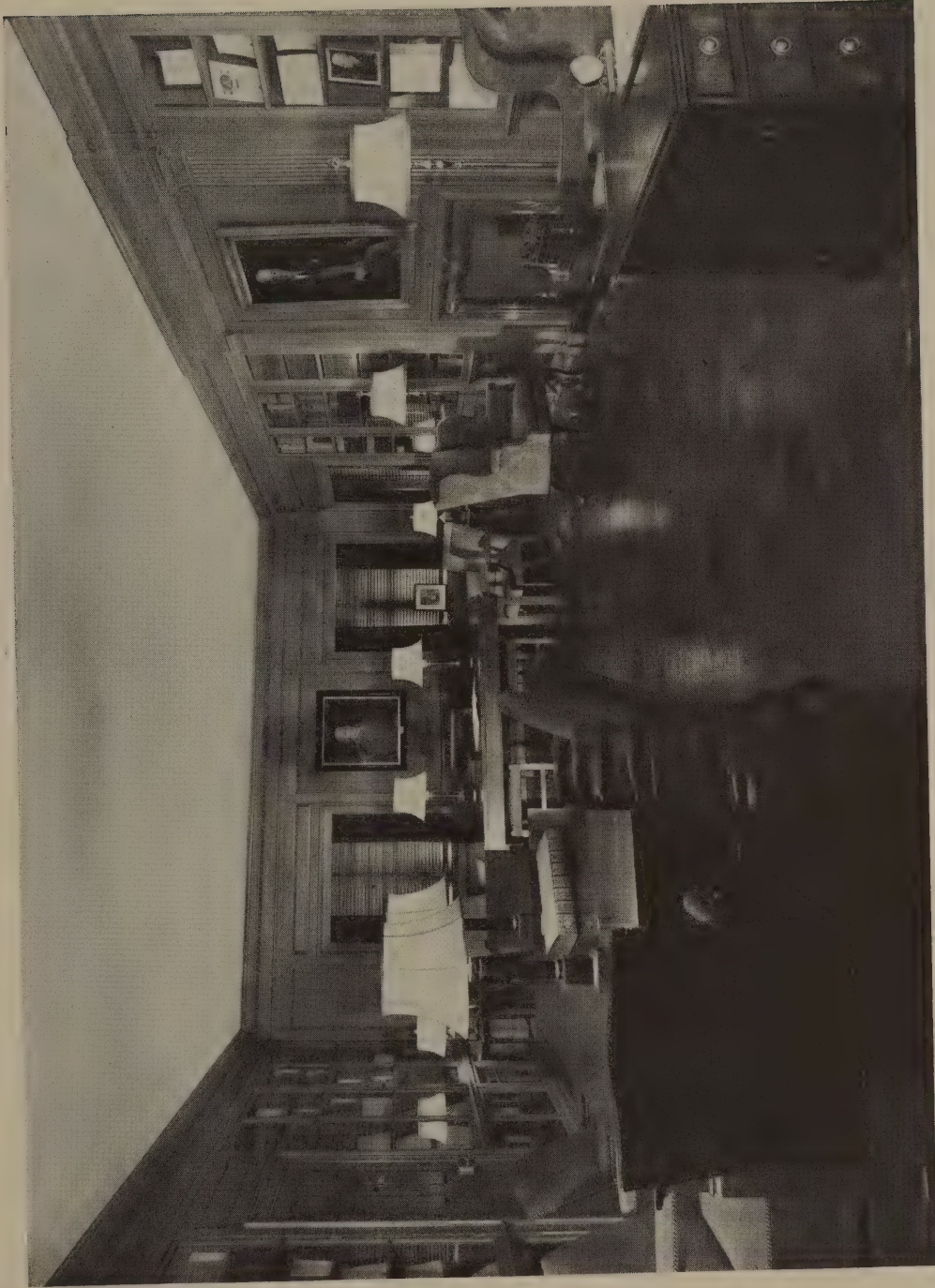
The first Compulsory Attendance Act was passed in 1895 but there was no enforcement. The school age was fixed at six to twenty-one years with compulsory attendance from eight to thirteen years. The law specified that pupils of the compulsory age must attend at least sixteen weeks per year. School officials throughout the State lamented the futility of such law. Even if there were attendance officers, they had no power of arrest. This was corrected and the first attendance officer was appointed in Erie in 1902.

Beginning with 1900, the following chart of the progress of events will indicate the dates of introduction of many phases of our current modern public school system:

- 1900—First kindergarten started.
- 1902—An ungraded school was opened; commercial course offered in high school; a normal department was organized for the training of teachers and continued until 1921.
- 1903—Manual training center for upper grade boys and domestic science center for girls of upper grades was started.
- 1907—Physical training started for high school girls.
- 1910—Medical inspection with physician and nurses inaugurated.
- 1911—Parent-Teacher Association started. Membership in 1936-1937, 6,141 in public schools.
- 1912—Open Air School for underweight children started. Summer playgrounds opened; athletic field purchased.
- 1914—Dental clinic opened.
- 1915—Supervising principal with psychologic training began devoting part time to examination of retarded pupils.
- 1915—The 6-6 plan of school organization authorized.
- 1916—Continuation School established for employed children between ages fourteen and sixteen.
- 1917—Vocational director and Americanization director appointed.
- 1920—The 6-6 plan started—six years in elementary and six years in high school.
- 1922—6-6 plan gives way to 6-3-3. This gives six years in elementary, three years in junior high school and three years in senior high.
- 1922—School for Deaf opened.
- 1923—Mental Guidance Clinic established. This later developed into the Child Study Department.
- 1924—Speech correction classes opened at Central High.
- 1924—Erie Stadium (capacity fifteen thousand) built by popular subscription.
- 1925—First platoon school organized at Emerson, Tenth and Cascade.
- 1925—Child study department organized.
- 1925—Class for crippled children opened at East High.
- 1929—Sight conservation class established at Emerson School.

In order to trace the construction of present (1938) buildings the authorizations by the board are listed below. When Erie, by annexation in 1920, virtually doubled its area, provisions for properly and safely housing pupils in the annexed territory were most inadequate and this, together with rapidly increasing high school enrollment, necessitated a goodly proportion of the later expenditures. The list follows:

<i>No.</i>	<i>Name</i>	<i>Location</i>	<i>Author- ized</i>	<i>Approximate Cost</i>
1.	Lafayette—3d and French.....		1877	\$26,300
2.	Jones—7th and Holland		1899	44,700



Treasure Room, Allegheny College, Repository of the Original Library of the College and Other Rare Books

<i>No.</i>	<i>Name</i>	<i>Location</i>	<i>Author- ized</i>	<i>Approximate Cost</i>
3.	Lowell—16th and Sassafras*	.....	1885	16,230
4.	Burns—5th near Chestnut	.....	1895	44,800
	Burns Addition	.....	1926	81,569
5.	Marshall—12th near German	.....	1891	40,000
6.	Irving—23d and Plum	.....	1897	45,000
	Irving Addition	.....	1926	203,675
7.	Washington—21st and Sassafras	.....	1910	109,000
8.	Columbus (new) 17th and Poplar....	.....	1914	232,820
9.	Franklin—Peach near 26th	.....	1891	40,000
10.	Gridley (new) 6th and Liberty.....	.....	1915	273,500
11.	Jackson—11th and French†	.....	1873	11,200
12.	Wayne (new) 6th and East Avenue...	.....	1914	118,000
	Wayne Addition	.....	1927	183,706
13.	Penn—10th and Ash	.....	1895	44,800
14.	Garfield—21st and German.....	.....	1895	44,800
15.	Jefferson (old) 23d and Ash‡.....	.....	1874	18,000
16.	Longfellow—8th and Walnut	.....	1883	42,300
17.	McKinley—22d and East Avenue.....	.....	1901	47,700
18.	Emerson—10th and Cascade	.....	1905	88,000
	Emerson Addition	.....	1924	115,300
	Perry—29th and Cascade	.....	1913	151,000
	Central High—10th and Sassafras....	.....	1896	181,000
	Shop Wing and Remodeling.....	.....	1931	68,000
	Lincoln—31st and Wayne	.....	1917	340,000
	Academy High—29th and French.....	.....	1917	1,180,200
	East High—Brandes and Atkins¶....	.....	1918	1,420,000
	Glenwood—3549 Peach Street, Addi- tion	.....	1921	9,600
	Roosevelt Jr. High, 23d and Cranberry	.....	1922	622,983
	Roosevelt Addition	.....	1927	
	Harding—8th and Lincoln	.....	1924	199,000
	Burton—1661 Buffalo Road, Remodel- ing	.....	1925	18,300
	Burton Addition	.....	1929	205,028
	Hamilton—Green Garden and Har- vard Road	.....	1925	62,300
	Vincent High—1330 W. 8th Street...	.....	1928	1,321,263
	Edison—E. Lake Road and Bacon....	.....	1931	180,000
	Jefferson—37th and Holland.....	.....	1930	265,000
	Cleveland—Mill Road and Marion...	.....	1931	20,000

*All classes discontinued in this building September, 1929.

†Site and building sold about 1923.

‡Classes discontinued September, 1927. Old building torn down.

¶The area of the city was doubled in 1920 by annexing surrounding territory. Much construction followed.

On August 6, 1914, by action of the board, the names of school buildings and sites designated were changed as follows:

No. 1—Lafayette	No. 9—Benjamin Franklin
No. 2—Henry S. Jones	No. 13—William Penn
No. 3—James Russell Lowell	No. 14—James A. Garfield
No. 4—James R. Burns	No. 15—Thomas Jefferson
No. 5—John Marshall	No. 16—Henry W. Longfellow
No. 6—Washington Irving	No. 17—William McKinley
No. 7—George Washington	No. 18—Ralph Waldo Emerson

Records show that all buildings constructed since this time have been designated by names rather than numbers. When the old Jefferson School at Twenty-third and Ash was torn down, the name was perpetuated by the new Jefferson at Thirty-seventh and Holland.

With the completion of Wilson Junior High in September, 1927, all junior high pupils from Lincoln were moved in and Lincoln became an elementary school. It was at this time that the old Jefferson at Twenty-third and Ash was abandoned and shortly thereafter torn down.

With the rapidly increasing high school population, elementary classes were moved one by one from Gridley to other buildings, the last class leaving in September, 1929, thus discontinuing Gridley Elementary School. Jackson School (No. 11) was used many years as a manual training and domestic science center. An opportunity class for retarded older boys and girls was held here also. Early in the 1920s, this building and site were sold and the Public Auditorium was erected shortly thereafter.

The Home School conducted for children of the Home for the Friendless at Twenty-third and Sassafras streets was discontinued when all classes were transferred to Washington School in September, 1931.

Lowell School at Sixteenth and Sassafras was discontinued for classroom use with the opening of the Irving addition in September, 1929. This building, with its additions, now forms the workshop and the warehouse for the School District of Erie. The Maintenance Department, L. R. McGrew, superintendent, has its offices in this building.

Erie High Schools—In the report of Superintendent Jones for 1866-67, the beginning of a high school organization is described in the following words:

"At the beginning of the year, the Board saw fit to inaugurate a radical change in the School System by consolidating

the higher classes of several schools in the city into one school called the Central High School."

Regarding the establishment of the first high school Superintendent Jones has the following:

"The school was located on the third story of building No. 2. The organization of the school was in some respects extremely difficult. Pupils were brought together who had been under all kinds of discipline and instruction; the mass of them had been 'through' and 'over' quite an extended course of study, but on a thorough and fair examination, the amount actually known was found to be small. A large majority had to 'begin at the beginning,' and as a natural consequence, a little disappointment was evident at the start, but it was soon dispelled by the gratification caused by thorough study and positive knowledge. . . . During the year, 144 pupils were enrolled; 58 boys and 86 girls."

The first graduates of the high school were two in number who completed their courses in 1869. Both, Ottomar Henry Jarecki and Adella Isadore Brindle, completed their high school requirements with honor.

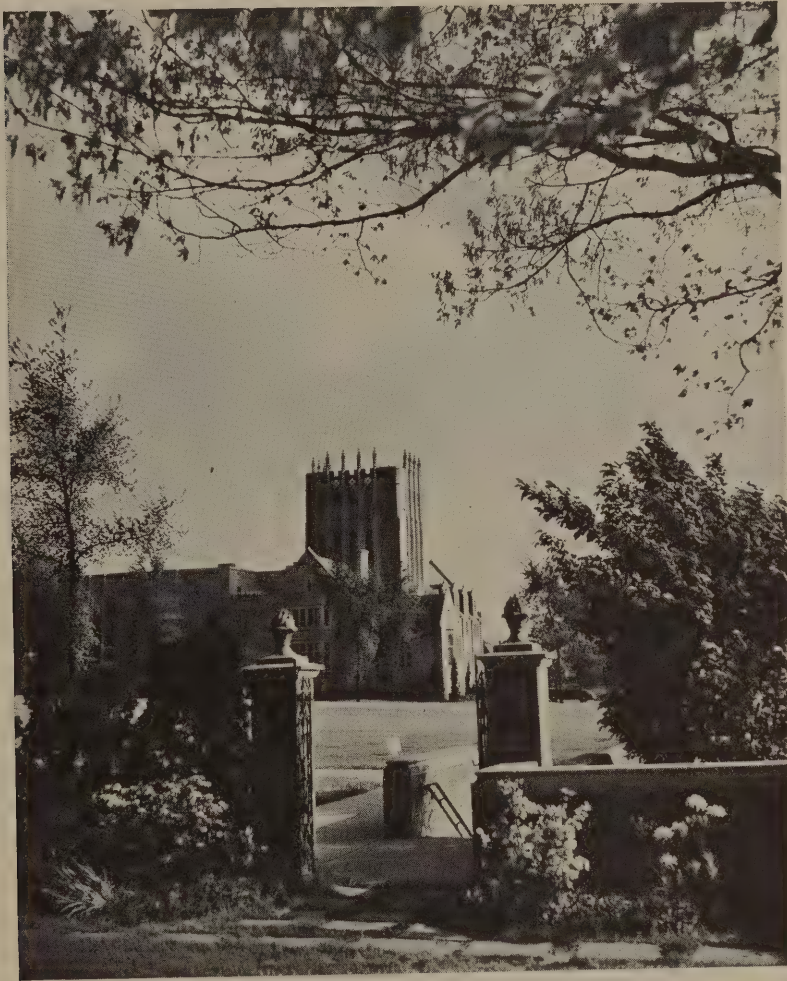
Of the earlier high school, Superintendent Jones reported to the board in 1878 as follows:

"In September 1866 the more advanced classes of schools Nos. 1, 2 and 3 were consolidated. The examination for admittance was very low in grade comprising (a) simple examples in common fractions, (b) decimal fractions and U. S. money, (c) the boundaries of two or three states and the names of any twenty cities and rivers in the United States, and (d) examples in mental arithmetic. No test was made of spelling or grammar.

"Ninety-six scholars were admitted the first month—seventeen from the East Ward No. 2 School, forty from the West Ward No. 1 School, fifteen from the Academy, twelve from a select school and twelve from schools not in the city. The records show that of this number, between sixty and seventy were accepted more on account of their age and capacity than on their standing in examination. . . . A book of directions and suggestions for the use of the teachers lies before me. Some of the leading topics are subtraction, divi-

sion, common fractions, capital letters, and analyzing easy sentences."

The late Carter W. Trow, in his recollections of the old high school wrote as follows:



Crawford Hall, Grove City College

"The writer's acquaintance with the Erie High School began in September 1877. . . . The yard, elevated several feet above the street, was surrounded by a stone wall on top of which was an iron fence. There were two gates, one on Holland and one on Seventh Street, which were reached by flights of stone steps leading up through openings in the

wall. . . . On the third floor there was a large study room in which the whole school assembled, four recitation rooms, two to the west and two to the east. . . . In each recitation room were from four to six long benches with backs, but without desks. Usually the boys sat on one side of the room and the girls on the other, facing each other, with the teacher's desk between them. The number of pupils enrolled in 1870 was 166; in 1880, 245; the number of girls being about twice the number of boys."

In 1882-83 Principal H. C. Missimer wrote as follows of the high school:

"It has often been said that the High School is not a legitimate part of the common school system, because its pupils are not of the common people, but are the children of those who are able to pay for their education elsewhere. This is not true. Our High Schools are emphatically the schools of the common people and afford them the only means by which their children can get as good an education as the children of the well-to-do. Nearly sixty-five percent of our High School pupils and graduates, are the children of persons who have little, or mostly, no property assessment on the tax duplicate books, and are, therefore, enjoying the privilege of higher education at the expense of their richer neighbors. Children of all circumstances in life are found in the High School—from the boy who has to earn the money necessary to clothe himself and buy his books, to the son or daughter of him who can, if he chooses, keep them in idleness. Both, however, stand on an equality in school. Common studies, the common standards of excellence for all, and in the High School, where our boys and girls begin to assert their intellectual independence, such things produce impressions that are stronger than the accidents of family, money or social position. The High School is the most vital part of our public school system because it promotes the very ideas on which republican government exists."

The Erie High School was organized June 26, 1866, and opened in September, 1866. From the very beginning, it was proudly called the "Peoples College." The high school remained in No. 2 School at Seventh and Holland streets continuously until 1891, when it was

transferred to Tenth and Sassafras streets with the exception of the years 1875 and 1876, when the former Erie Academy at Ninth and Peach was used. J. M. Wells was the first principal, serving from 1866-70; he was followed by William Reed, Jr., 1870-73; H. C. Missimer, 1873-90; John C. Diehl, 1890 to 1919, at which time Academy High School was opened with John C. Diehl as principal and George O. Moore was made principal of Central High School. Mr. Moore served until 1922, when he became assistant superintendent; he was followed by Elmer G. Frail, who served this school until after it was transferred to the new Vincent High School in September, 1930. The first mid-year class was graduated in February, 1926. In February, 1931, the Central School was opened as a Technical High School, with John F. Jeffery as principal, a position he still holds. The first two-year trade certificates were awarded at Technical High in June, 1931, and the first technical diplomas for the four-year course were awarded in June, 1932.

In 1897 a large addition was made to Central High School with grammar school pupils on the first floor and the high school using the second and third floors. It was called the "Jumbo School" of the school district and it was commonly predicted that the school would never be filled. In April, 1931, contract was let for the shop addition and remodeling of the interior of the central building in order to make it more efficient as a Technical High School.

As the percentage of high school enrollment increased much more rapidly than the population, relief was necessary. In 1913, two sessions of high school were necessary—one group coming in the morning and the other in the afternoon. In 1914 there was an enrollment of 935. A decade later it had risen to 5,439, and another ten years had witnessed a climb to 9,551 in 1934.

In September, 1917, Gridley Junior High School was opened with Elmer G. Frail as principal. This was the first transfer of pupils to bring relief to overcrowded Central High. The organization of classes included seventh, eighth and ninth grades, but the teachers were not fully trained in the junior high philosophy. It was a new movement in school organization. In order to give many of our seventh, eighth and ninth grade teachers a better vision and grasp of the junior high possibilities, an extension course in junior high organization and administration was given during the year 1918-19. Many of the Gridley teachers attended; also, many seventh, eighth and ninth grade teachers throughout the city took the course. Mr. Frail served as principal of Gridley until September, 1922, when he

became principal of Central High. Frank T. Chamberlain was then made principal of Gridley Junior High, a position he still holds.

In September, 1919, the shop wing of East High School opened as a Junior High School with C. W. McNary principal. He served until September, 1921, when he became principal of Academy High, succeeding John C. Diehl, who became assistant superintendent. John W. Ray followed Mr. McNary as principal of East High, and is serving that school at the present time. The main building at East High was opened for high school classes in 1921 and the first class was graduated in 1923. The first mid-year class was graduated in January, 1928.

Academy High School was organized in September, 1919, with John C. Diehl as principal. Since the building was not ready for occupancy, sessions were held afternoons during the year 1919-20 in Central High School. Academy High accepted all ninth, tenth, eleventh and twelfth grade pupils living south of the New York Central Railroad tracks. When Academy High moved to its own building in September, 1921, a number of seventh and eighth grade pupils were transferred there from nearby elementary schools. The first commencement exercises for Academy High were held in June, 1920, in Academy High Auditorium. Commencement exercises for Central were held in the same auditorium. For many years previously all commencements were conducted in rented theatres. The first mid-year class in any of our high schools was in Academy High on January 30, 1925. In September, 1921, C. W. McNary became principal of Academy High.

Lincoln Elementary School opened in September, 1919, with A. J. Nicely principal. In September, 1922, junior high classes were moved in and it was continued as both elementary and junior high until September, 1927, when the junior high classes were moved to Wilson Junior High with Mr. Nicely as principal and Lincoln became a full elementary school. Mr. Nicely has served as principal of Wilson Junior High continuously, with the exception of 1932-34, when he was principal of Vincent High School. During this period, 1932-34, W. E. Coon served as principal of Wilson.

Roosevelt Junior High was organized in September, 1923, with C. F. Brockway as principal. Since the building was not fully ready for occupancy, the school was conducted afternoons at Academy High for one semester. Mr. Brockway served until 1929, when W. E. Coon became principal of Roosevelt. He served until October, 1931, when he became assistant principal of Vincent and J. Thomas Phalan became principal of Roosevelt.

Strong Vincent High was opened in September, 1930, with Elmer G. Frail as principal, who served until retirement in 1932. The first class graduated on January 27, 1931. A. J. Nicely succeeded Mr. Frail and served until 1934, at which time he was succeeded by W. E. Coon.

An addition to the junior high school family was Burton, which opened in 1932 with Melvin E. Morse as principal.

Records for a period of many years show that approximately one-third of our high school graduates enter colleges throughout the entire United States, including more than one hundred higher institutions of learning. Up to and including 1941 the number of Erie high school graduates was 20,187.

Elk County School Nursing (By Dr. J. H. Blackwell)—Public school nursing in Pennsylvania has followed the program laid down by Lillian D. Wald in 1902 in the New York City schools. Many large cities and third class school districts of Pennsylvania followed her lead in establishing school nurses in their public schools.

A school nurse's program is not confined to the school alone, but at least half her time is spent out in the community and homes of the children. The school nurse is one of the main contacts between the home and school and endeavors to establish good relationships between the two institutions. She calls the attention of the specific defects of the children to the parents and aids them in getting the defects corrected.

The first school nurse in a rural fourth class school district was placed in Jay Township, Elk County, in 1937. Dr. Leo Z. Hayes, of Force, was largely responsible for this new innovation and brought a service that had been used exclusively in larger districts to the small rural district where such a service would mean so much to the health of the rural families. It was largely due to his insight and perseverance that this needed program received its impetus. Due to this initial step being taken the following rural townships in the surrounding area employed school nurses: Horton, Wilcox, Benzinger, St. Marys, of Elk County, and Huston Township, of Clearfield County.

The first nurse employed was Miss Ida Parisi, of Weedville (1937), followed by Mrs. Virginia Smith, of Wilcox (1939), Mrs. Eileen Ferraro, of Horton Township (1940), Miss Margaret Chappell, of Benzinger (1942), and Miss Olsen, of Huston Township (1941).

INSTITUTIONS OF HIGHER EDUCATION

State Teachers Colleges at Edinboro and Clarion—It is an odd coincidence that of the fourteen normal schools maintained by the

Commonwealth, The State Teachers College at Edinboro is the third oldest, and the similar institution, at Clarion, is the third youngest in point of establishment. They both instruct about the same number of students, with Edinboro serving the larger body of undergraduates. Both grew out of the early realization that in order to have good schools there must be good instructors, and the pre-Civil War academies and colleges were not providing either a sufficient number of persons reasonably well prepared for their tasks. Many of the normal schools were first housed in former academies that had met with



Campus Entrance, Clarion State Teachers College, Clarion

waning fortunes when a free or public school system took the place of the pay school whose tenure of teacher and length of terms depended upon the wealth and pressure exerted by the people in various localities.

Edinboro never has been a populous borough, but in 1856 it was able to raise a truly goodly sum to build an academy. It functioned well and was fairly well attended. In the meanwhile normal education had already made history elsewhere. The Pennsylvanian Training School for Teachers, still doing valiant service, was founded in 1842, at California. Under a legislative act of 1857, Erie, Crawford, Mercer, Lawrence, and Venango counties were set up as the Twelfth Normal School District of Pennsylvania. There were the

usual difficulties in the choice of a town in which to locate the normal school of the Twelfth District, with Edinboro and its very good academy building influencing the choice. The village was but twenty miles from the city of Erie and within two miles of the boundary line between Erie and Crawford counties. The old academy was purchased by the public authorities and the Edinboro Normal School was legally established on January 26, 1861. Professor J. A. Cooper, who had been an instructor in the academy, was appointed the first principal of the new school, and for almost three decades he directed



Chapel, Clarion State Teachers College, Clarion

its affairs and became one of the outstanding educators in western Pennsylvania. He was not only a skilled teacher, but an excellent administrator, and did wonders in the pioneer work of initiating a normal program for which he had few precedents and not many colleagues. He won a place for his institution among the best in the State, despite the fact that similar schools were founded after the Civil War, and in larger and wealthier centers.

Clarion is very proud of its State Teachers College, "an institution of higher learning, situated in this beautiful town, with its modern buildings and inviting campus, which covers twenty-three acres," according to the "Clarion Republican." Quoting and rewriting further from this publication: The original Carrier Seminary Hall is

still in use and is quaintly picturesque among the more modern buildings. It houses the library and the president's office, as well as several classrooms. Founders' Hall, formerly known as Science Hall, and Music Hall provide many classrooms. There are two modern dormitories in use. Becht Hall is used by women students and faculty members. The first floor of this building is the center of the school's social activities. The spacious, beautifully-decorated lounge and the large dining room are most attractive. Egbert Hall, most recently built, provides accommodations for men.

Assembly programs, graduation exercises, lectures, and musical and dramatic productions are presented in the beautiful stone chapel.

The well-equipped Harvey Gymnasium overlooks a well-cared-for athletic field, where many interesting contests have been fought.

Thaddeus Stevens Demonstration School, one of the most modern education buildings in this section, has accommodation for the first six grades of the public school and up-to-date kindergarten, where students receive practical training in the art of teaching. The A. J. Davis Education Building, recently constructed, is soon to be occupied. It consists of offices and sixteen classrooms. The Thaddeus Stevens School, completed in 1929, cost more than \$100,000.

The Clarion Teachers College, founded in 1886, was opened on April 12, 1887, with an enrollment of 140 students. Its origin goes back, however, to 1866, when the Erie Conference of the Methodist Episcopal Church established the Carrier Seminary in Clarion. Building operations on Carrier Hall, begun June 16, 1868, were completed at a cost of about \$75,000. After a few good years the seminary began to fade for lack of support.

In 1873, State Senator from Clarion, David McCoy, secured the passage by the Legislature of an Act creating a new Thirteenth State Normal School District to include Clarion, Jefferson, Forest, McKean, and Warren counties. In 1874 an effort was made to convert Carrier Seminary into a State Normal School, but met with opposition. In 1883, A. J. Davis, Clarion County superintendent of schools, was appointed to the State Department of Education at Harrisburg, and carried on a continuous campaign for the establishment of a normal school at Clarion. Aided by R. G. Yingling and others in 1886 the proponents of a normal school opened a summer course for teachers in Carrier Seminary Hall, attracting 127 students. Public subscription raised a fund of \$40,000; and then Erie Conference agreed to sell Carrier Seminary for \$25,000. The purchase was made, the Legislature appropriated \$25,000, and ground was broken

for the first State Normal School buildings here in 1886, two new dormitories being built.

Additional campus acreage was purchased when the new school was about to become a reality, and again, in 1908, the present athletic field was added to the campus grounds. The present campus extends over more than twenty-two acres; and the school buildings have increased from three, in 1887, to include a completely-equipped educational plant valued at more than \$1,000,000.

Ten presidents have directed the college's affairs since its foundation. A. J. Davis served from 1887 until 1902, to be followed by Samuel Weir, who was president until 1904. J. George Becht, in whose honor Becht Hall on the campus is named, held the office from 1904 until 1912. Harry M. Shaffer followed as president, serving until 1913. A. T. Smith was president of the college for six months during 1914, to be followed by A. P. Reese, whose service terminated in 1918. Clyde C. Green was president of the school from 1918 until 1926, and Robert M. Steele held the position from 1926 until 1928. Dr. G. C. L. Riemer was president of the college from 1928 until February, 1937, when the present president, Dr. Paul G. Chandler, was appointed.

Allegheny College—Northwestern Pennsylvania has cause to be proud of Allegheny College because of its history and rating as the elder institution of its kind in this part of the State, its major achievements down over more than a century and a quarter, and its constant and present standing among the colleges of the United States. Few of the smaller institutions of higher education have so noteworthy a faculty, few have stimulated a greater proportion of their graduates to engage in postgraduate studies, few can point more justly with pride to the parts played by their graduates in public affairs.

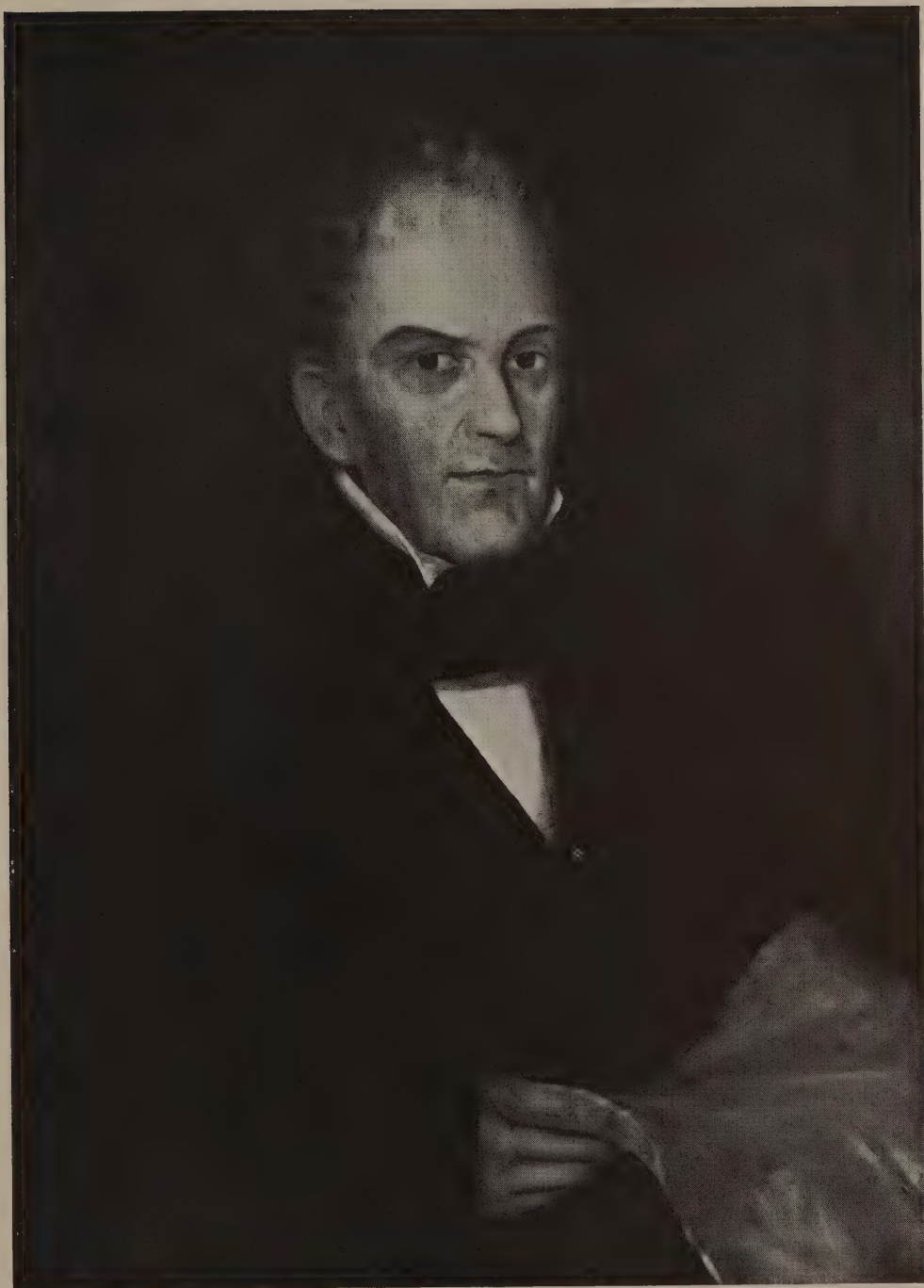
In "ye olden tyme" the establishment of a school or college was done in one of two ways—either a group of people hired a teacher, or some man started to teach. Usually both ways were combined before any substantial success was attained. The founding of Allegheny College (it was spelled Alleghany for the first eighteen years) resulted from the decision of one Timothy Alden, New England, who after more than a two months' journey during the worst of winter, arrived in Meadville, Crawford County, April 24, 1815. He was a lineal descendant of John and Priscilla Alden, graduate of Harvard, the fifth generation of Harvard men, Master of Languages. Alden

was interested in land, was a Congregational preacher, but more than this was determined to start a college, and selected Meadville, Crawford County, then in fact if not in name, the seat of government in northwestern Pennsylvania. By June 20, 1815, he had talked to such good purpose that on that day, a group of men met in the big courthouse (a two-story log cabin) to initiate such a school. Major Roger Alden presided over the meeting, with John Reynolds as secretary, and later treasurer. The "Resolutions" adopted were strong and direct:

"The importance of advantages for a classical education, and the want of an institution, where such an education may be obtained in the extensive region watered by the Allegheny River and its numerous contributory streams, and destined, in all human probability, to be overspread, at no great distance of time, with as many inhabitants as an interior section of the United States, of equal magnitude, are a sufficient reason for awakening our attention to this subject."

Timothy Alden was elected president of the prospective college, and professor of Oriental Languages, which then included Latin, Greek and almost any far or near Eastern tongue. The Rev. Robert Johnson, Presbyterian minister, of Meadville, was chosen vice-president and professor of "Logick, Metaphysicks and Ethicks." No charter could be obtained from the Legislature until March 24, 1817, when the sum of \$2,000 was allotted the college, the beginning of two decades of reluctant aid given by the Commonwealth. Not even the "dominion lands" were added to the income of the institution. In May, 1817, Timothy Alden was made president of the board of trustees, and on July fourth, of that same year, he was unanimously elected president of the Faculty of Arts and professor of Oriental Languages, Ecclesiastical History and Theology, and was impressively inaugurated in his numerous posts, on July 28, 1817.

Timothy Alden was head of the original Alleghany College for sixteen years and from the modern point of view was not successful. The early student body was seldom as many as ten, and the average number of graduates under his régime was about one. There never was money enough to carry on, and the president never received any salary from the college. He and his family managed to live on sums donated to him as preacher and missionary, and he was missionary not alone to the whites, but to the Seneca and Munsee Indians in upper Pennsylvania and southwestern New York. Lacking support

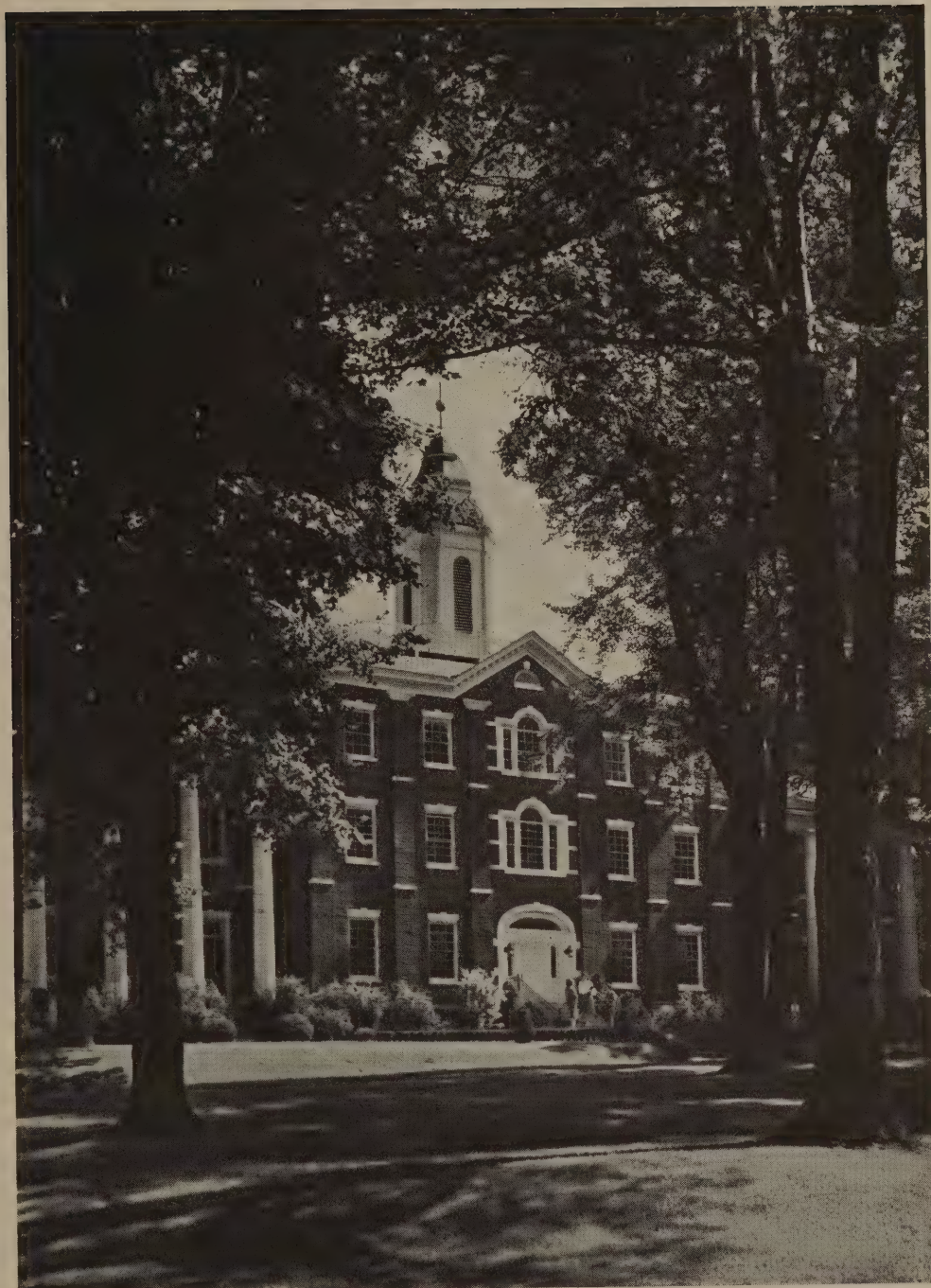


Timothy Alden, Founder and First President of Allegheny College

of the Presbyterian clergy, the interest of the Methodist denomination in the school, which began in 1827, became dominant. Two bad years, 1830 and 1831, spelled the end of Presbyterian control and the resignation of Timothy Alden on November 11, 1831. In 1833 the college came under the patronage of the Methodist Church which withdrew its interest in Madison College, at Uniontown, Pennsylvania, and persuaded the latter's faculty and potential students to come to the Meadville institution.

It can be written of Timothy Alden that all he could turn over to other educators as the fruit of his long and arduous labors were a building and a library. He had lost his land holdings, his home and his wife. When he died on July 5, 1839, in his sixty-eighth year, he felt that his life had been a failure. A century and more later it is now certain that Timothy Alden had been a success, the outstanding proof of which is the present Allegheny College, the monument to his foresight, work and perseverance. If there are two possessions of which this school is proudest, they are the library and "Old Bentley Hall" that it owes to the first president.

Before the first steam railroad had been constructed in America, Bentley Hall had been built. Its corner stone was laid July 5, 1820, the project being made possible by the gift by Samuel Lord of five acres on a hill, and the loan of use for nine months of Lord's brickyard. Timothy Alden drew the plans, but only after most disheartening years was the building completed. It was appropriately named in honor of William Bentley, D. D., pastor of the East Church, Salem, Massachusetts, who was the first in New England to befriend Allegheny College. The second most loved possession of the institution is the library, or libraries, now housed in the "Treasure Room" of the college, the gift of Mrs. Thompson in memory of her husband, Arthur Webster Thompson, class of '97, to provide facilities for research and to display the original library and other rare books. In 1816, President Alden returned from a money-raising trip to New England, with a small amount of money, and \$1,642.26 value in books. In 1819, the Rev. William Bentley died, leaving all his "classical and theological books, dictionaries, lexicons and bibles to the college at Meadville, Penna." Isaiah Thomas, prosperous printer, sent to get this library, was so impressed with its value that he added five hundred volumes of his own, and there were gifts by James Winthrop. These became the nucleus of the rare collection in the Treasure Room. Down the years building after building has been added to the equipment and plant of Allegheny College:



Bentley Hall, First Building of Allegheny College, Meadville

Ruter Hall (1855), in memory of the Rev. Martin Ruter, D. D., second president of the college.

Hulings Hall (1881), erected in memory of Marcus Hulings, a prominent citizen of Meadville.

Wilcox Hall (1892), named in honor of its donors, Mr. and Mrs. Robertson Wilcox.

Physical Education Facilities (1896, reconstructed in 1920), gymnasium, including Montgomery Athletic Field.

Newton Observatory (1901), the gift of Mrs. Mary M. Newton, in memory of her husband, Captain D. C. Newton, once a student at Allegheny College.

Ford Memorial Hall (1901), the gift of Captain John B. Ford, in memory of his wife, Mary Bower Ford.

Reis Library (1902), the gift of William Edward Reis, class of '69, rebuilt in 1931 by means of additional gift of the donor.

Cochran Hall (1908), the gift of Mrs. Sarah B. Cochran.

Carnegie Hall of Chemistry (1915).

Alden Hall (1915).

Hammett Beebe, Tarbell and Lee Houses (1928-38), small dormitories.

Caflisch Hall (1929), made possible in part by gift of Mrs. Margaret E. Caflisch as a memorial to her husband, Jacob C. Caflisch.

Arter Hall (1929), gift largely of the late Frank A. Arter, class of '64.

Bousson Camp (1934), contains 324-acre tract for recreational activities, Lake Siple being in the center.

Ross Home (1940), named in honor of Dean Clarence Frisbee Ross, graduate of the class of 1891.

Anna Cloyde Brooks Hall (1940), named in honor of Mrs. Charles Brooks, of Pittsburgh.

Walker Hall (1941), named in memory of Colonel Lewis Walker, graduate of the class of 1877, a generous and devoted friend of the college.

The Allegheny College of today is a school that in 1941 had a student body of 735, instructed by a faculty of fifty-four, under the able leadership of Dr. William Pearson Tolley. Its plants, including twenty-one buildings and modern athletic field, is valued at \$2,500,000, and there is a productive endowment of more than \$1,500,000. The library has been doubled in size in the past decade, and houses nearly one hundred thousand volumes. The campus is one of unsurpassed beauty. The institution is a Class "A" college on the list of the Federal Bureau of Education. It is an affiliate of the Carnegie Foundation for the Advancement of Teaching, and it receives appropriations from the General Board of the Rockefeller Foundation. For more than four decades (1901), it has had a chapter of the Phi Beta

Kappa, highest scholastic honor society. It has chapters of six other national fraternities, seven musical organizations and three student publications. In 1941 Dr. William Henry Crawford was president emeritus; Clarence Frisbee Rose was dean emeritus, and since 1931 William Pearson Tolley, Ph. D., D. D., Litt. D., has been president of Allegheny College.

Two colleges give Mercer County a prominent place as a higher educational center in northwestern Pennsylvania—Thiel College and Grove City College. Each differs from the other in history, objectives and support, features which account for differences in development and size. One has remained a "church" school, the other, while church in origin, long since has functioned along other lines.

Thiel College—More than three-quarters of a century ago, when our internecine conflict was at an end, and men's minds were turning once more to the ordinary ways of life, education took on a renewed importance and there began a period of educational progress that did not lose much of its initial impetus for years. In about 1865 one A. L. Thiel gave Rev. W. A. Passavant, of the Second German Lutheran Church, of Pittsburgh, \$5,000 to be used in some form of Christian benevolence. This and probably other contributions, purchased in 1866 the lands and buildings of a summer resort located at Philipsburg, Pennsylvania. Soon after Rev. Mr. Giese opened a typical "classical" school of that day, which was conducted for several years as Thiel Hall. Upon the death of A. L. Thiel on February 16, 1870, it was disclosed that he had left a bequest of \$70,000, which made possible the establishment of the college that bears his name. A year earlier the Thiel Hall property had been offered to the Synod of the Evangelical Lutheran Church on the condition that it must in perpetuity be used for Christian education under the control of the above church, and should form the basis of a synodical institution of learning under the control of the Pittsburgh Synod.

Almost at once a movement was initiated to remove the site of this school of higher education to Greenville, Mercer County, which proved successful when this town offered a site for the institution and a gift of an additional \$20,000. A tract of seven acres was donated by Dr. D. B. Packard, of Greenville. Later this was increased to seventy acres, lying north of the Little Shenango, in the highlands, one of the most beautiful campus sites.

At first school sessions were held in the Central Union School, but on June 25, 1874, the first permanent building was dedicated. It

was three stories, of brick construction and was named "Greenville Hall," the corner stone of which was laid on August 15, 1872. Another building of the same height and construction, but smaller, was dedicated November 10, 1886, known as Memorial Hall. In 1890, Jesse Daily, of Greenville, presented a dormitory for young women, named in his honor, "Daily Hall." Other buildings have been added during the present century.

Dr. Henry W. Roth was the president of Thiel College from 1875 to 1887, leaving to devote himself to work in connection with



Thiel College, Greenville

the establishment of the Lutheran Theological Seminary, at Chicago, Illinois, and the management of the Passavant hospitals in Chicago, Milwaukee, and later Pittsburgh. A truly great church and educational leader, his influence in the development of Thiel College was outstanding and constructive. Other early presidents of the institution have been William A. Beates, 1888-89; Frederick Augustus Muhlinberg, D. D., 1891-93; Theophilus B. Roth, 1893-1903.

Grove City College—Long before there was a railroad to what is now Grove City, yet more than a half century after a settlement had been started there, and two decades after the passing of the "Free School" law, the people of what was then Pine Grove, encour-

aged Rev. George M. C. Thompson, D. D., to open a school in a private home for "instruction in the higher branches of learning," which meant the equivalent of a high or college preparatory school. Dr. Thompson gave it up after two or three years. In 1864, Rev. William T. Dickson, pastor of the Pine Grove Presbyterian Church,



Hall of Science, Grove City College

taught academic courses in his home, and later in his church. His enterprise was continued for a few years. The names of these two learned clergymen are mentioned in connection with Grove City College because they made important contributions to the cause of higher education in the town and gave a distinctly religious trend to such education as exemplified in the present institution, which is not denominational.

A third fine name in the story of the rise of Grove City College is that of Ketler, borne by both the first and the present (1942) presidents of the institution. In 1876, Isaac C. Ketler hired the upper of the two stories of a brick schoolhouse, built in 1874 by the school directors of Pine Township for general school purposes. He equipped at his own expense this "select" school and opened it on April 11, 1876, to about a dozen pupils. The enterprise proved increasingly popular and, in 1878, Professor Ketler, with the aid of others, set about getting property that would provide for a still larger increase in number of students, range of service and permanency. To this end a stock company was formed, which raised about \$4,000 in shares of ten dollars per value. Incorporation papers bear the date of August, 1879, and an academy building was erected on four acres of campus at an expenditure of some \$10,000.

The improved facilities marked the beginning of a rapid expansion of attendance and support. In 1884 the trustees of the corporation applied for an amendment to the charter, by which Pine Grove Normal Academy was converted into the Grove City College. In 1894 the stock feature of the institution was eliminated and a charter obtained much after that of other similar schools in the Commonwealth.

Alliance College at Cambridge Springs, Crawford County, is one of the finest experiments in national cultural education in the United States, and one which possibly has suffered the most from "outrageous fortune" in that it was practically destroyed by fire in 1931 and compelled to recover from this disaster when our country was approaching the depths of a national financial depression, from which there was no natural recovery until the approach of a second World War largely increased incomes and expenditures in our country, but not for education. It was founded in 1912 as the Polish Alliance College, taking its title from the Polish National Alliance, the largest organization of American Poles and Americans of Polish extraction. The high purpose of the founding group was to provide higher and vocational training for youths (males at the beginning), of their national origins, while at the same time keeping alive the noble ideals and traditions of an ancient and influential people.

No less a personage than President William Howard Taft gave the movement his blessing, together with other statesmen and many of high place in the educational circles of our Nation, when Alliance College initiated its work close to Cambridge Springs.

However high their aims, the practical was the first consideration in the organization of Alliance College. A splendid and ample site was secured. In 1912 an academy was founded, offering full four-year classical, general and scientific courses, of a grade that was later accepted by any institution of higher learning in the country that admitted students on the basis of high school certificates. In 1915 a trade school was organized, which since has offered one and two-year courses in applied electricity, automobile construction, operation and repair, carpentry in various forms, machine design and drafting, machine shop practice, patternmaking, plumbing and steamfitting, tool and diemaking and other occupations. In 1924 a junior college was initiated, presenting pre-professional courses in the field of the law, medicine, and the like, covering the first two years of college studies. There long has been an endeavor to raise this to full college status, an ambition that thus far has been prevented by circumstances beyond human control.

The site of the school comprises some 180 acres, a part of which is occupied by the various buildings, the remainder being beautifully landscaped. On January 20, 1931, the main building and much of the plant were destroyed by fire, a tremendous and vital loss. With exemplary courage the Polish Alliance raised funds for the construction of a \$200,000 dormitory, named "Kosciuszko Hall," the second and third floors of which were given over to student quarters. The main floor houses many institutional departments. The gymnasium was built in 1924 and is ample for its services. The Trade School, at a quarter of a mile distant from Kosciuszko Hall, is large, well equipped and notably successful in instruction. While anybody is welcome as a student at Alliance College, it is preponderantly attended by those of Polish origin or extraction, and several hundred students are enrolled annually.

The city of Erie not only possesses a most modern and comprehensive public school system, but is exceptionally well supplied with schools of higher learning. The University of Pittsburgh maintains in the Erie Trust Building a "Center," where a full corps of instructors and officials present five programs leading to degrees up to the final year. There are also courses for postgraduate students on Saturday mornings and in the evenings.

Mercyhurst College and Villa Maria Academy and College are Catholic schools. Both are for girls and women only; both maintain summer sessions, and Villa Maria also carries on extension courses. The two colleges were founded within a year of each other, in 1925

and 1926. Villa Maria is the elder by this year and also in the fact that its buildings are located on the site of Villa Maria Academy, founded in 1891. It offers four-year courses leading to the degree of Bachelor of Arts in the literary and classical fields; and to the degree Bachelor of Science in chemistry, biology, home economics, education, commercial education and social sciences. In addition to the college courses there are elementary classes and a four-year high school curriculum. As of 1941 there were a teaching staff of thirty-two and a student enrollment of 384. Joseph J. Wehrle is president of the institution.

The splendid plant of Mercyhurst College, wonderfully situated in a seventy-five-acre development in Glenwood Hills, and commanding a panoramic view of Lake Erie, always impresses the visitor and is one of the several places of interest of which the city is justifiably proud. As indicated, it is a woman's school that was founded in 1926. It is a fully accredited institution ranking high in its field. In 1941 the student body of 250 was instructed by a staff of thirty-two. Mother Eagan is dean of Mercyhurst College.

At DuBois, the largest city of Clearfield County, Pennsylvania State College conducts a valuable undergraduate center that has proved its worth.

EDUCATIONAL DEVELOPMENT OF MCKEAN COUNTY

By County Superintendent of Schools C. W. Lillibridge

In common with other counties of Pennsylvania the immigrants from New England made the greatest contribution to the earliest educational development in the northern regions of the Commonwealth. These hardy settlers from religious and political heritage, as well as the democratic influences of pioneer life, were very favorable to the movement which finally resulted in the free public school system of the State. The attitude of citizens of the northern regions toward the law of 1834 is best shown by the vote on repeal in September of that year. One hundred ten of the 987 school districts of the State were located in the seven counties of northwestern Pennsylvania. One hundred nine of these voted in favor of the law and against its repeal. This is a record not equalled by any other region of the Commonwealth and one that has been too little publicized in the regions which in those early days stood practically unanimously in favor of a free common school system for all children of the State regardless of sect or class.

Just how humble the beginnings of the common schools were in the early pioneer settlements none will ever know. Extracts from diaries lead us to believe that in every little settlement there was a "select school" taught by some gifted person whose educational opportunities had been more generous than that afforded the average individual. Perhaps a little later there was a more formal type of schooling in a log cabin erected by the citizens and presided over by a teacher who boarded around and found more substantial remuneration in the tuition fees paid by the parents of the pupils. Certainly we can rest assured that the law of 1809, which provided educational advantages for the children of those parents who made an affidavit that they were financially unable to pay for the tuition of their children, found little favor with the democratic settlers whose early homes in New England had been founded by the side of the church and the common school. "Pauper education" had no place in their scheme of things, and hence, as above stated, their support of the common school law of 1834. We read in a report made by M. O. Campbell, superintendent of the county schools in 1879, that the first school in McKean County under the common law was taught near Port Allegany by Eliza Manning in 1834. We furthermore read in the "Tri-County History of McKean, Elk and Cameron Counties," that as early as 1811 the Catholic Church had established a school at Instanter, the second settlement in point of time in McKean County.

Records on file in the State Department of Public Instruction, Harrisburg, state that in 1836 there were expended in McKean County for school purposes \$90.50 in State appropriations and \$275.38 from public taxation. In 1837 the same sources mention the school districts of Ceres, Hamilton, Norwich and Sergeant in McKean County, and Shippen in what is now Cameron County. These districts had eight teachers and as many schools with a pupil enrollment of 304 who attended an average school term of three months at a total cost of \$298.

In the year 1853 Pennsylvania in an effort to better organize school activities under the common school law provided for the office of county superintendent of schools. The first incumbent of this office in McKean County was F. A. Allen, who made this significant report:

"There are 70 one-teacher schools in the county. The monthly cost per pupil is 27¢ while the total amount raised by local taxation is \$1,723 with \$805 paid to the districts by

the State. Twelve of the thirteen towns in the county have schools, all of which were visited save one which was 35 miles away. This school was not reached before the term closed. All the schools were in operation sometime during the year. The text books are antiquated with no uniformity, each pupil furnishing his own. The school houses are indeed miserable, a few with blackboards."

In 1857 Superintendent L. W. Wisner, in his annual report, says that the salaries paid teachers are liberal, "the males receiving an average of \$21, the females, \$13 per month." In 1861 Superintendent Conforth resigned to become chaplain of the 150th Regiment, Pennsylvania Volunteers. In 1870 Superintendent Milliken in his report mentions the Smethport graded school. He later states that he was accustomed, while visiting schools erected to take care of children of parents living in lumber camps along the Big Level, to alight from the narrow gauge railway anywhere between Lantz' Corner and Kanesholm, and then with the help of a large pocket knife blaze a way through the woods in order that he might be sure after his day's labors were over of finding his way to the railroad again.

In 1873 Superintendent Curtis makes a report that there are two graded schools, one at Smethport and the other at Bradford. In 1879 Superintendent M. O. Campbell makes mention of the Smethport Academy established by Act of Assembly in 1829, but not opened for instruction until 1837 with Luther Humphry as principal.

In 1887, W. P. Eckles, at that time principal of the Kane schools, became superintendent of the county schools. It was during the period of his incumbency that the schools of the county began to develop along modern lines due largely to the vitalizing influence of the rapidly expanding petroleum industry. The region passed from pioneer to industrial conditions with a corresponding energizing influence on the educational development of the county. Superintendent Eckles was a well-trained schoolman who was able to meet changing social conditions with energy and enthusiasm. He organized the first graded course of study for all schools of the county. One of his reports shows that the county had 287 teachers, an enrollment of 10,332 pupils, and an average school term of 7.5 months.

J. E. Myers was made superintendent of the county schools in 1896. Once again an industrial awakening brought a corresponding growth in educational affairs. This time it was the rapid development of the boroughs which resulted in better graded schools in both the

township and boroughs, and the beginning of a worth while secondary school program. Equipment, buildings and quality of teaching were all making noticeable improvement.

In 1905 B. S. Bayle, of Mt. Jewett, was chosen to the county office. He was a very energetic schoolman, who systematized school procedure and office details. It is due to his efforts that the county school office has been able to furnish school records, including evidence of age, to those who seek to establish these matters with Federal Social Security authorities. Thanks to his painstaking efforts these records go back to 1909.

In 1911, C. W. Lillibridge, of Eldred, was chosen to succeed Mr. Bayle. Several factors have combined to make his superintendency as effective as it may have been. There was the background of three administrations of practical and enthusiastic schoolmen. The school laws were codified and expanded in 1911, making it possible for townships to have much better schools than those to which people had been accustomed. Teacher preparation and certification were placed on a much higher basis. The way was made easy for increasing high school attendance from rural districts. A premium was placed on school consolidation by the payment of \$200 annually for each school that was closed. Consolidation was also helped by a good-roads movement that was initiated by public-spirited citizens in all sections of the county. And then again and most important, McKean County found itself at the close of the First World War in the midst of another industrial awakening that matched the original oil boom in scope and popular enthusiasm. The price of oil properties went, in many instances, to \$4,000 per acre. Production reached the peak of early oil days. Townships and boroughs alike felt the social and industrial impact of this development in McKean's major industry. Since 1920, ninety-five one-teacher school buildings have been abandoned. In their places eighteen consolidated elementary and high school buildings have been erected. More than sixty per cent. of all pupils living in the fourth-class school districts in the county are now transported to these new schools. This statement includes residents of townships and boroughs alike. McKean is one of the few counties of the State that transports practically all its high school pupils to some one of the excellent secondary schools. More than ninety per cent. of all the pupils have the advantages coming from expert instruction in public school music. Many districts have nurse and dental services. Others have art and more recently with the aid of Free Foods Distribution hot, noonday meals in commodious cafeterias.

In 1937 a county film library was organized that today numbers 147 films. The latest addition made in 1942 comprises forty-seven films of the Yale Chronicle Photo Plays. This was made possible through contributions of the school districts and public-spirited citizens and organizations of the county. A few of the outstanding educational events have been mentioned. They only indicate the deep interest shown in public school education by the people of the county and the whole northwestern area of the Commonwealth. Underneath it all there is still the abiding faith and belief that, after all, education of its children is one of the most important functions of a democracy.

CHAPTER XIV

General Industry

Pennsylvania, with her enormous natural resources of petroleum, natural gas, coal and various other materials, her transportation facilities, and the ingenuity of her citizens in making good use of these advantages, has come to be recognized as the great industrial State of the Nation, and northwestern Pennsylvania has played a most important part in the building of this great industrial empire.

As has already been related, the first important commercial industries of the region were lumbering, tanning and the iron industry. Lumbering, in spite of the unfortunate lack of early reforestation, is still an active industry, and appears destined to assume greater proportions. The tanning industry is still an important one in the region, while there are under consideration plans for the resumption of the iron industry which was at one time so important in the region.

Industry in the State is remarkably diversified and this is true of the northwestern region as well as in the State generally. Even in the original oil region, where that industry assumed such vast proportions and remains so active, and where now in connection with the serious problems created by the modern mechanized war, it is making most valuable contributions, the industrial life is quite diversified.

Among the more important industries, in addition to petroleum in the region, may be mentioned the steel, paper, textile, refractory, gas and steam engines, Diesel engines, pumps, pneumatic tools, air compressors, oil field equipment, electrical equipment, boilers, railroad equipment and glass industries.

The history of the glass industry is a very interesting subject. The manufacture and decoration of glass is an extremely old craft, so old that its origin is not certainly known. Both the Egyptians and the Phœnicians were familiar with it; Egyptian opaque glass of the fourth millennium B. C. exists, as do glass vessels made by the Egyp-



Warren's Industrial Center From Cemetery Hill

tians about 1800 B. C. It is thought probable that these master craftsmen invented glassmaking, and the Phœnicians, a traveling people, developed the craft and spread the knowledge of it. There exists Assyrian clear glass of about 700 B. C., and the Greeks are believed to have made glass about 600 B. C. But glass blowing was not invented until near the beginning of the Christian era by the Phœnicians at their great city of Sidon, a "glass center"; both Tyre and Sidon seem to have copied in glass the designs of Greek pottery. The Romans learned the craft of glassmaking, probably from conquered peoples, and brought it to a superb state of perfection in the days of the empire. They mastered most of the technical processes in glassmaking, produced pure crystalline glass that was ranked with the precious metals in value, perfected the difficult "Cameo glass," of which the "Portland vase," broken in 1845, was the most famous example, made spun glass and *millefiori* glass and invented processes of applying gold leaf as ornament.

Byzantine glassmaking flourished from the sixth to the tenth century, but was superseded by that of Venice as early as the end of the eleventh century. This period marks the beginning of the great Venetian glass industry; in 1291 the larger furnaces were banished from the city as a fire hazard, and the industry as a whole moved to Murano. Here glassmaking reached its zenith in the sixteenth century, and was artistically a Renaissance product.

It is an interesting fact that the great period of stained glass brought a definite hiatus in artistic achievement in glassware, which had flourished before the Gothic era and was to flourish again after it. The Venetian glassmakers of Murano perfected the exquisite delicacies of lace glass, the highest development of the difficult thread glass; they wrought marvelous colors in *millefiori* glass, used gold traceries and gold leaf work, did beautiful enameling on glass, imitated precious stones in colors, made crackled glass and other interesting varieties; the shapes of their vessels were also extremely beautiful.

But when glass cutting was invented at Prague about the year 1600, Bohemia began to rival Venice as a glass producing center. Although beautiful glass is still made there, and the craft has been subject to modern revival, Venice has never regained its old supremacy. With some interruptions cut glass has remained the most popular decorated form.

The Bohemians did beautiful engraving on glass, and the Bohemian "gold sandwich" glass of the eighteenth century was also

famous. In France, Germany and Spain the craft of glassmaking was continued from the Roman period. Glass works were established in Normandy in 1330, and Colbert greatly stimulated glassmaking in France in the seventeenth century, but the great French development of artistic glassmaking, which amounts to leadership, dates only from the late nineteenth century. In England a great step forward was taken in the invention in 1673 of "flint glass," a crystal glass made with an admixture of lead. It was fragile, but of great brilliance and beauty. This is used for tableware and cut glass, and since the English introduction of cutting and engraving from Bohemia in the first quarter of the eighteenth century, the making of cut glass has been a thriving British industry.

In America almost no glass was made before the eighteenth century. Casper Wistar's glassworks were established in South Jersey in 1732. Some thirty years later occurred the firing of the furnaces which produced the most beautiful glass ever blown in this country, that made at Manheim in Lancaster County, Pennsylvania, by Henry William Stiegel ("Baron von Stiegel"), who had already made a name for himself in the manufacture of iron, between the years 1765 and 1774. The famous Sandwich Company of Massachusetts was founded in 1825.

Stiegel's glass was probably the first flint glass manufactured in the United States; it was finer than the other early American glass and it followed European fashions and designs in etching and color work. Unfortunately the unsettled business conditions of Revolutionary times brought Stiegel's enterprise to disaster.

The modern development of glassmaking, after the decline which nearly all crafts suffered in most countries in the early nineteenth century, can probably be traced to the Paris Exposition of 1870. It is interesting to note that many of the French artists who have been its leaders were masters in other forms of creative design before they turned to glassmaking.

In the United States recent tendencies follow the lines of European development, but the favrile glass invented in 1890 by Louis Comfort Tiffany, also a painter, is a well-known American product. Important contributions to the industry have been made by Holland and Czechoslovakia and, although not inaugurated there until the beginning of the twentieth century, in Sweden also.

Common glass, like that used for bottles and window glass, is made from white sand, pure limestone and soda ash, together with other chemicals. A large variety of chemicals is employed for making

special glasses such as the finer table ware, art windows and oven glass.

Red glass is produced by the addition of gold, copper oxide or selenium; amber and yellow, with charcoal, uranium oxide, or cadmium sulphide; blue, with the oxides of copper and cobalt; violet, with manganese dioxide. The milk or opal glasses result through the use of bone ashes or minerals containing aluminum and fluorine.

Glass may be pressed, blown, drawn or rolled. Products include window glass, plate glass, table ware, ornamental ware, apparatus for scientific use, optical glass, camera and telescope lenses, etc., together with the colored glasses employed for traffic and other signals, art windows, and other ornamental purposes. In recent times glass has been introduced in the production of an almost endless number of products ranging from glass building blocks to fishing lines. Today people really can live "in glass houses."

Since the closing years of the eighteenth century, glassmaking has played an important part in western Pennsylvania. While Pittsburgh was earning for itself the name of the Birmingham of America it was also becoming known as a glassmaking center. The district of which Pittsburgh is the nucleus became, in fact, the leading glass-making district in the United States and western Pennsylvania glass became famous for its distinctive beauty, not only in the United States, but in many foreign countries as well.

The industry extends back to the time when western settlers began to regard glass as a necessity rather than as a luxury. There was an increasing need for glass windows to take the place of oiled paper or clapboard shutters in the new homes. Bottles were in demand for containers of whiskey and porter, and glass table ware was needed to displace crude utensils such as wooden bowls, trenchers, noggins, gourds, and hard-shelled squashes.

The western settlers could not depend upon the East for their glass. The difficulty of securing raw materials and capital, as well as the restrictions of the British mercantile system, prevented the early growth of a glass industry in the East or anywhere else in the country. Although commission merchants in the western settlements purchased shipments of window glass and glassware from the East soon after the Revolution, the physical difficulties and high cost of carriage by pack horse over the several hundred miles of mountains and wilderness seemed an insurmountable barrier in supplying the demand for these fragile articles in the trans-Allegheny settlements. These difficulties really proved a stimulus for the manufacture of

glass within the region. It was the great demand for glass in the rapidly growing settlements, shut off from the East, that led several commission merchants to promote the building of glass works.

Advantages for transportation determined the choice of location. The early enterprisers built their works along the Ohio and its tributaries, which formed natural outlets for their products. After operations were well under way, they sold glass to pioneers traveling westward, as well as to settlers in the communities where the glass was made.

The demand for glass bottles was an important contributing factor in the development of the industry. As a result of poor transportation facilities in the western country during the period of early settlement, the farmers converted their surplus grain into whiskey for shipment in that form to outside markets. At first, kegs were the chief containers for whiskey; but as time passed, bottles came more and more into use, especially when taverns began to dot the highways of travel. Bottled whiskey was transported down the streams to the main water-highways and thence down the Ohio River, sometimes to the Kentucky settlements and sometimes even as far as New Orleans. Isaac Craig and James O'Hara, who were among the first glassmakers in western Pennsylvania, carried on a thriving commission business in liquors, porter, and beer. They also owned distilleries, and in conjunction with their glass business they shipped down the rivers boatloads of bottles, both filled and empty.

It was the custom of the early farmers in converting their surplus grain into whiskey and the imposition thereon of a government tax that led to the Nation's first civil war, the Whiskey Insurrection.

Before the close of the eighteenth century, two successful glass works were operating in western Pennsylvania. Craig and O'Hara had erected the Pittsburgh Glass Works on the south side of the Monongahela River at Pittsburgh, a favorable location for shipping their products down the Ohio. Albert Gallatin and a group of men had built the New Geneva Glass Works on the Monongahela River near Georges Creek, whence shipments were sent westward over two routes, one by way of the Monongahela to the Ohio River, the other by way of the overland route to Wheeling. A third successful glass works was erected in the fall of 1807 in Pittsburgh. The following year it was acquired by Benjamin Bakewell, who soon became one of America's foremost glassmakers. His works was the first in western Pennsylvania to produce flint glass, and the only works of its kind in the United States during this period to remain in operation until flint glassmaking was permanently established.

During these early years the glassmakers met with many difficulties. They were unable to utilize many raw materials that later were to prove important in the industry. Raw materials were relatively inaccessible at that time because methods of extracting and preparing them were crude and because facilities for shipping them were poor. Lead was shipped up the river from Illinois; alkaline salt was shipped from Ohio; and alkali was usually nothing more than potash derived from burnt timber. The only sand available was the coarse, yellow material found along the streams in the vicinity of Jacob's Creek, Whitely, and Belle Vernon. Because of impurities in this local product, such as alumina, manganese, and oxide of iron, the glass resulting from the "melt" was either brown or green in color. Later, when the Missouri region was opened, a better grade of sand was discovered, and the region was then assured a fine white sand for the manufacture of flint glass. Not until the middle of the century, however, were the nearby quarries of Juniata and Hancock opened, and not until then was Pittsburgh's leadership in the glass industry definitely established.

The clay used in making furnace crucibles in which the glass was melted was obtained with great difficulty. Thomas Hutchins, who visited the western country during the Revolutionary period, thought that there was in the region an abundance of clay suitable for glass works, but actually the contrary was true. Pittsburgh glassmakers repeatedly offered rewards for the discovery of good clay beds, but without success. It was necessary, therefore, to cart clay in barrels over the mountains from New Jersey at great expense. Later, when a better grade of glass was demanded, western Pennsylvania began to rely upon clays from England, Germany, and Holland. Not until the third quarter of the century was a method discovered to prepare Missouri clay for glass-furnace crucibles.

A second major problem that confronted the glassmakers of western Pennsylvania was the difficulty of securing and keeping skilled glass blowers. This was the problem that characterized the glass industry in America from early Colonial times, and even long after political independence had been secured, the dependence upon foreign skilled workers was keenly felt. The early arrivals were chiefly German glassmakers, although a few English and French craftsmen appeared. Conditions in the frontier country, with its extensive areas of free land, instilled in these workers a spirit of wanderlust and freedom from restraint. Employers were forced to offer inducements in order to secure and keep blowers. Often they advanced money

toward traveling expenses of prospective workers, who, when settled, received other considerations, such as a free house, free fuel, and wages even when the furnace was not in blast, as well as the privilege of making a garden.

Thus the shortage of skilled workers led to practices that later in the century caused unpleasant relations between capital and labor. The system of apprenticeship, which developed out of the efforts of the early glassmakers to solve their labor problems, led to frequent strikes. The early "plantation system," in which the worker was provided with house, fuel, and garden on the property of the owner in lieu of wages, was the forerunner of the "company store" evil.

Another major problem was that of finance. The initial capital required to erect a glassworks in the early days of the industry ranged between ten thousand and forty thousand dollars. In the beginning, capital usually came from commercial ventures. A few glassmakers had accumulated capital by supplying provisions to the American Army operating against the Indians in the Northwest. Others accumulated capital through private enterprises and mercantile houses. As the glass industry became well established, it produced capital within itself for further expansion, and many workers who served on the pay rolls of O'Hara, Bakewell, or Gallatin became leaders in the industry. A few of these were William Price, Frederick Wendt, Nicholas Swerer, Charles Ihmsen, Adolph Minehart, Sr., James W. Nicholson, Frederick Lorenz, William McCully, and William Eberheart.

Besides the initial outlay for construction, a great deal of capital was needed to operate the works. Because of the nature of the industry and because of the slowness and seasonal character of transportation it was necessary to keep on hand large quantities of materials. In operating the works, the crude frontier methods of exchange created a handicap and forced glassmakers to grant long-term credit and to do much business by barter. As a result of the urgent need for capital, many glass manufacturers aided in organizing banking institutions, such as the Pittsburgh branch of the Bank of Pennsylvania and the Bank of Pittsburgh.

In spite of these many difficulties, the glass industry grew steadily. Two factors were chiefly responsible for this growth; first, the increase in population of the western country; and, second, the advantages of water-highways. These two factors were closely related in the rapid settlement of Ohio that followed the decision of the national government in 1800 to sell land there on credit. The pur-

chase of Louisiana from France in 1803 opened up more than a million square miles for settlement. Soon the Ohio and Mississippi rivers became important highways in the exchange of the lead, sand, and saltpeter of Louisiana and Missouri territories, on the one hand, and the glass of Pittsburgh, on the other. Glass was shipped down the rivers to the forts, stockades, and settlements along the route as far as New Orleans. The political settlement with France also opened the way for the shipment of large quantities of bottled porter down the Mississippi to the West Indies and the Atlantic Coast in



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seagoing vessels that had been built along the upper Ohio River; while large cargoes of glass were shipped down the rivers on flat-boats, reloaded upon seagoing vessels at New Orleans, and consigned to the Atlantic Coast or even to Europe.

The embargo of 1807, while depressing many industries of the Nation, really had a beneficial effect on the glass industry of western Pennsylvania. A new wave of immigration ensued, and capital was transferred from shipping interests to industry in the West, as exemplified in the organization of the Bakewell company. In 1808, when window glass was selling for thirteen dollars a box of one hundred feet, Cramer's "Almanack" called the attention of its readers to the fact that an additional twenty thousand dollars' worth of glass could be used in Pittsburgh alone.

The War of 1812 also benefited the glass industry. The only apparent inconveniences resulted from interference with trade in the western country and from restrictions on importation of foreign clay and diamonds. But as a result of the double duty on foreign glass, the demand for the domestic product increased, while the necessity for depending upon domestic raw materials and markets tended to unify the East and the West. To such a point had the industry progressed by 1817 that production at five works in the western Pennsylvania district alone reached \$240,000, and technical improvements in design and quality led visitors to heap praises upon the district's craftsmen and their distinctive products.

The years from 1817 to 1837 may be called the period of competition in the glass industry. Previously, the difficulty and high cost of transporting glass from the East over several hundred miles of bad roads had prevented serious competition from foreign glass. Following the War of 1812, however, the improvements in transportation facilities and the depreciation of the currency made the problem of competition a serious one. Furthermore, in order to regain her former markets, Great Britain inaugurated a policy of stifling American industries by shipping enormous quantities of goods and selling them, sometimes at a loss. As a result of the enormous influx of foreign glass and the accompanying panic, the industry in western Pennsylvania declined.

In order to remedy the distressing conditions, the glassmakers in the western Pennsylvania region joined with other manufacturers in the movement for tariff protection. Describing the alarming results of the discontinuance of the double duties that had been established during the exigencies of war, a report of a committee appointed by the citizens to inquire into the state of manufacturing, made on December 21, 1816, stated that the production of flint glass made in Pittsburgh, formerly valued at \$130,000 per year, had decreased about \$30,000 a year. On February fourteenth of the following year, Walter Lowrie, of western Pennsylvania, in a resolution presented to the Pennsylvania Senate, depicted the effects of foreign imports on the major industries of the State: "The citizens of this state have already embarked extensive capitals in manufactures, particularly in iron and glass, woolen and cotton goods. But the large and unprecedented importation of foreign articles, has given a shock to our infant manufacturers, unprotected as they now are by discriminating duties." Such statements as these reveal the plight of the manufacturers and explain their desire for Federal legislation to protect and encourage the manufactures of the State.

While western Pennsylvania glassmakers were feeling the effects of the influx of foreign manufactures, the financial panic of 1818-21 descended upon the region and brought about an almost complete cessation of industry. The crisis was the result of a faulty money system and of speculation resulting from the rapid business expansion during the period of embargo and the period of war. Nevertheless, there was a tendency to place a preponderant emphasis upon the lack of high protection as the cause for the Nation-wide depression. At a meeting held in Pittsburgh on October 9, 1819, two glassmakers, Benjamin Bakewell and George Sutton, were appointed to a committee for obtaining signatures to a tariff memorial that was to be sent to Congress and to the State Legislature. A second committee was appointed at this meeting to collect information relative to the decline of manufacturing since the close of the war. The latter committee reported on December 24, 1819, that the production of the different kinds of glass in Pittsburgh had decreased from a total of \$235,000 to \$35,000.

At the same time that glassmakers were bombarding Congress with petitions, a movement aimed at the support of domestic industries swept western Pennsylvania and manifested itself in a general boosting of domestic goods. As early as the fall of 1818 a precedent was established by the Bakewell company when that firm made a set of cut glass tableware for President Monroe. People were urged to follow the example of the President in not buying foreign articles if domestic ones could be obtained. Messrs. Bakewell, Page, and Bakewell were keenly aware of the need for encouraging protection. The following year they sent to the editor of "Niles' Weekly Register," a protectionist publication, a pair of glass decanters "as a token of the high sense we entertain of the service you have rendered our country, by the publication of many valuable essays on political economy, and as a specimen of the progress of the arts in the west." The token was conveyed with the expressed hope that Congress would adopt at the ensuing session a measure that would be beneficial to domestic industry.

Pittsburgh glassmakers also took part in organizing societies for the purpose of encouraging domestic manufactures. At a meeting of the Allegheny County Society for Protecting Agriculture and Domestic Manufactures, held on February 3, 1820, William Eichbaum and Thomas Bakewell were appointed to a committee of prominent citizens who were to circulate subscription papers with a view to enlarging the membership of the society. At this meeting a resolution was

passed to send memorials to Congress petitioning aid and protection for manufacturers. At this time many glassmakers also joined coöperative marketing associations, such as the Pittsburgh Manufacturing Association, whose first president was George Sutton. In this association's warehouse one of the chief articles of Pittsburgh manufacture was window glass.

In Congress the supporter of the cause of the glassmakers was Henry Baldwin, of Pittsburgh. He had been instrumental in securing an increased duty on cut glass at the close of the war, and now he became the leader of the political faction in favor of higher duties. In defending a new tariff bill he frankly admitted that it was protective in principle and detail, but he resented the charge that the bill was partial to his own city and declared:

"This has been called a Pittsburg, a cut-glass bill, local, partial in its operations—and I have been charged with framing it from interested motives. . . . I tell the house frankly, that I have not lost sight of the interest of Pittsburg, and would never perjure myself if I had; but the charges shall be met plainly, and if you are not convinced that the interests of that place are identified with the nation, that *cut* glass can be defended on national grounds, then I agree, that Pittsburg, its representative, its favorite manufacture, and the tariff, may go together."

Although Baldwin's measure passed the House of Representatives, the Senate by a majority of one decided to postpone consideration of it until the next session, at which time the question of the tariff was again temporarily shelved. The cries of the protectionists in state and national legislatures, in local societies and national conventions, were hushed when the economic depression subsided.

Another attempt to effect protective legislation, made in 1822, also failed, but Baldwin was rewarded in 1824 by the passage of the tariff act of that year. This Act increased the duties on glass considerably. At this time, also, the glassmakers were further benefited by the return of prosperous conditions. Glass factories were now working full time, and by the close of the first quarter of the century, western Pennsylvania glass was known and sold from Maine to New Orleans, and even abroad.

Although the tariff problem lost its economic significance during the prosperous years that followed, it was revived in party conflicts. The final outcome of party manipulation at this time was the tariff of

1828, which was known as the "Tariff of Abominations." In spite of prosperous conditions and unexpected reductions in the price of glass, opposition to this tariff became vociferous, especially in the South. The voices of the protectionists in Congress and the reports of the manufacturers at home had little influence in allaying the clamors. In the meantime it was generally recognized in Congress that a downward revision of the tariff was inevitable and, accordingly, in 1832, a bill was presented and passed. Although the Act reduced duties as a whole, it affected the rates on glass but little.

The crisis in the tariff controversy came with the Ordinance of Nullification, which declared that the tariff acts of 1828 and 1832 were null and void within the borders of South Carolina. It was at this critical moment that Henry Clay laid before Congress his famous compromise measure, designed to reduce the tariff to the level fixed in 1816, the proposed reductions to be made in easy stages over a period of ten years. To the glass industry of western Pennsylvania, the compromise Act meant that the gains made for the cause of protection would be wiped out by 1842. By the third decade of the nineteenth century, however, the industry was established on a firm basis, and the change of tariff rates had little effect. Furthermore, the manufacture of pressed glass by machinery had become so efficient that America was actually exporting this type of glass to Europe.

During this same period the glassmakers faced competition at home. The problem arose from attempts of other districts to enter markets formerly controlled by western Pennsylvania and was closely related to the improvement of transportation facilities to the West. From early times, Pittsburgh, the nucleus of western Pennsylvania, had been considered the key position in the trade between the East and the West. After the completion of the National Road to Wheeling in 1822, the glassmakers of the Wheeling district secured advantages for transporting raw materials and glass manufactures far above those of Pittsburgh. Likewise, the Erie Canal gave advantages to New England glassmakers for shipping their products to the region south of the Great Lakes.

From the beginning, the glassmakers in western Pennsylvania took part in the movement for better transportation facilities. They foresaw the advantages that a waterway system across Pennsylvania would have in satisfying the increasing demand for glass in the East. The completion of the Pennsylvania Canal System in 1834 made those advantages possible. This land and water route ushered in a quicker and cheaper method of transportation. Shipping lines advertised fast

freight service that reduced the time required for transit between Pittsburgh and Philadelphia to about eight days. Freight rates were lowered about sixty-six and two-thirds per cent. Glass was shipped eastward to the region that during the early period had been the only source for glass. The amount of window glass shipped to eastern markets from the commencement of navigation in the spring of 1835 until November of the same year was 5,908 boxes, or 531,720 pounds.

The Pennsylvania Canal System, while providing facilities for the east-west trade, did not solve the problem of supplying Pennsylvania glass to the Lakes region. This region was being supplied by glass-makers of Boston, who shipped their flint glass by way of New York City and the Erie Canal. The glassmakers of the Wheeling district also shipped glass to the Ohio and Indiana markets. In 1825, after much controversy, which involved conventions, memorials, and press propaganda, the Legislature of Pennsylvania passed a bill providing for a canal from the Ohio River to Erie by way of the Beaver and Shenango rivers, and two years later it joined with the Legislature of Ohio in providing for a canal connecting the Beaver and Lake Erie Canal with the Ohio Canal extending from Marietta on the Ohio River to Cleveland. The latter, or the Pennsylvania and Ohio Cross Cut Canal, was completed about 1840, and Pittsburgh secured access to Lake Erie at Cleveland. The results were important for the glass industry. Freight rates on glass over the new waterway between the two cities were reduced to about twenty and three-fourths cents per hundred pounds.

A third transportation project was the improvement of the Monongahela River. From the beginning this river had played an important part in the development of the glass industry of western Pennsylvania. Sand of the Brownsville region supplied the glass works all along the river, including those at Pittsburgh. In the exchange of raw and finished products with the East, the Monongahela served as part of the route, during the time of year when the water was high. When the National Road was completed there was a need for improving the river so that Pittsburgh might compete with Wheeling with its longer navigable season, and thus divert part of the trade that was growing between Wheeling and Baltimore. Although the movement for improvement began before the completion of the National Road, nothing was actually done until after the incorporation of the Monongahela Navigation Company in 1836. Perhaps no group contributed more to the success of the undertaking

than the glassmakers. Among those who were active in the work were James W. Nicholson, George Sutton, Anthony Beelen, Thomas Bakewell, Benedict Kimber, George Hogg, James L. Bowman, William Eberheart, Andrew Stewart, Morgan Robertson, William Eichbaum, and William Bakewell.

During the period between 1837 and 1857 the glass industry reached a condition of relative stability. A constant demand for glass had developed as a result of the tremendous growth in population and the improvement in standards of living. And, too, the high degree of efficiency in manufacturing that had been attained permitted the industry to meet foreign and domestic competition.

There were still difficulties to be overcome, however. The problem presented by the seasonal character of navigation on the Ohio River was not done away with until the advent of the railroad. While the average rate for shipping a hundred pounds of glass by water from Pittsburgh to Cincinnati ranged between ten and fifteen cents during seasons of navigation, rates on glass when the water was low were advanced to a dollar or more. Attempts were made to lengthen the navigable season by constructing light-draft steamboats that could operate in shallow water while carrying moderate loads of merchandise. But nothing was done to improve the river to which the commercial and industrial prestige of Pittsburgh was chiefly due. The railroad solved these transportation difficulties. Among the glassmakers who took an active part in the movement for railroad construction were Benjamin Bakewell, Thomas Bakewell, Frederick Lorenz, George Hogg, and Harmar Denny.

The development of transportation had a revolutionary effect on the glass industry. Whereas in 1800 almost a month was required to ship glass by wagon over the roads between Pittsburgh and Philadelphia, by 1841 only about ten days were required. The reduction in rates was also impressive. The cost of shipping a hundred pounds of glass over this route in 1800 was about ten dollars, but by the latter year the cost had dropped to about a dollar and a quarter. This reduction on wagon service was, of course, partly due to the low rates on the Pennsylvania Canal System, which were sometimes as low as a dollar and thirteen cents a hundred pounds. After 1853 the rates of canal transportation were reduced to forty or fifty cents to conform with those charged by the railroad. This last stage in transportation development was the most revolutionary for the glass industry, for it not only reduced the rates of glass shipment, but also introduced the factor of speed.

Another factor that tended toward the stabilization of the industry was technical improvement. A cheapening of the processes of manufacture aided in creating a more nearly universal demand for glass. Perhaps the most revolutionary discovery in this field resulted from a series of experiments conducted in the fifties to ascertain the practicability of using lime as a substitute for lead in making table ware. The success of lime glass was due to the work of such men as John Adams, William Phillips, James P. Wallace, and William Leighton. The introduction of larger furnaces and sand-washing machines further lessened the cost of production, besides bettering the quality of glass. The pressing machine, which was developed to a high degree of efficiency in western Pennsylvania, contributed a method of producing fine glassware in large quantities and thus enabled even the lowliest person to make use of this household convenience.

The industry had advanced rapidly in size during the first half century of its history. In 1856 there were about forty-five glass houses in Pittsburgh and Allegheny. The records show nine window and green glass firms operating twenty-two furnaces and producing 561,600 half boxes of window glass, valued at \$1,123,200; bottles and druggists' ware, valued at \$329,250; and 80,000 demijohns, valued at \$32,000. A report on table ware manufactories in Pittsburgh during the year 1857 listed eight firms, which produced \$1,147,540 worth of glass from their 150 pots. A second report for the same year listed for the Pittsburgh district thirty-three glass works, controlled by nineteen firms, which employed 1,982 employees, with total wages of \$910,116 for the year. The total production of these glass works reached the unprecedented sum of \$2,631,990, a production that exceeded that of any section in the United States. Surely the wonders wrought in this industry during a period extending over a little more than half a century depict a story filled with romance characteristic of glassmaking throughout the ages.

Even though the chief deposits of glass sand are found in central Pennsylvania, glassmaking has been a very important industry in western Pennsylvania. The presence of an unlimited supply of natural gas has had much to do with the drawing of the industry where the supply is available. Pennsylvania leads the states in glass production, with West Virginia second and Ohio third, Indiana following closely and, in 1929, these states, with Illinois, produced seventy-four per cent. of the total output of the country.

It is interesting to note that the process of commercial glass blowing has only comparatively recently yielded to complete mechani-

zation. A friend of the author's family, Michael Owens, was the inventor of the machine for the manufacture of glass bottles. Mr. Owens originally was a coal miner in West Virginia, later going into a glass works there, and finally to the Libby Glass Works in Toledo, Ohio, where he invented his machine. He later visited the industrial centers of Europe and introduced his machines, which were not sold, but were leased.

He melted the glass in large tanks at about 2500° F., using sand, limestone, soda ash and other chemicals. The molten glass was mechanically sucked into a form. This form shaped the neck, which was then held by a groove in a blow mold and the rest of the mass blown into a bubble and shaped to form the finished bottle.

There have been numerous modifications of this process. In one of these, the glass flows from a spout and drops in sausage-shaped masses into molds, where it is shaped and blown. The bottles are afterwards sent through an annealing oven to remove strains that might cause them to break. Some modern machines are able to produce six to eight bottles per second. Sizes vary from the tiny sample vial to twenty-gallon demijohns, and the quality varies from that of the ordinary milk or beverage bottle to the finer compositions of fancy perfume bottles.

The ancients used bottles made from skins, stone, pottery, ivory, bone, and metal (bronze, silver and gold). Skin bottles are still used in eastern Europe for containing wine. Bottles are among the oldest glass articles recorded in history. Specimens found in Egyptian tombs date back over five thousand years.

Mr. Owens was the founder of the Owens Bottle Company in Toledo, a member of the firm of Libby-Owens, also in Toledo, manufacturers of plate glass and cut glass, and who were famous for the excellence of the latter product. Upon his death, in 1923, Mr. Owens left a vast fortune to his family. His name is still associated with the glass industry as the Owens-Illinois Company, which is reputed to be the largest producer of milk bottles in the country.

Erie, the largest city of northwestern Pennsylvania, situated on Lake Erie, is both a very historical city and, with good railroad facilities and an excellent harbor, has become a very important industrial center. The industries of Erie are both great in number and quite diversified in character.

One of the most important and largest of the city's plants is that of the General Electric Company. The property of the Erie works

of the General Electric Company consists of some three hundred acres of ground located in the township of Lawrence Park, adjacent to the city of Erie. This ground was purchased in 1907, but factory construction was not begun until 1910.

The actual manufacture of equipment was initiated on July 3, 1911. The equipment manufactured during the earlier days included motors and control for gas-electric rail cars, mining and industrial locomotives, air compressors and air-brake equipment. Later the manufacture of railway motors and railway control was transferred from Schenectady and Lynn.

During the World War of 1914-18 the Erie plant was utilized for the development and manufacture of turbines for United States Navy destroyers. For a time also commercial turbine-generator sets and some lines of transformers were built at Erie.

There is a total of seventeen major buildings which are now used in the manufacture of the following products: Iron malleable and alloy castings; wood and metal patterns; refrigerator cabinets; mining locomotives; railway locomotives; refrigerated truck bodies; railway motors and control; automotive motors and control; bus motors, generators and control; direct-current generators for Diesel-electric locomotives; railway air compressors, air-brake equipments, controllers, control equipments and air conditioning equipment; household refrigerators; industrial motors.

Other outstanding features of the Erie plant include the large locomotive erecting shop from which as many as one hundred locomotives have been turned out in a single year.

A feature of the Erie works is the completely equipped locomotive testing plant adjacent to the tracks of the East Erie Commercial Railroad, where complete operating tests are given to all types of railway locomotives. The track used for testing includes four miles of standard gauge ballasted track with catenary overhead suitable for eleven thousand volts as well as lower d-c voltages. For a distance of two miles also a third rail is provided for testing cars and locomotives equipped for this type of current collection.

Among the notable locomotive manufacturing contracts were the forty-two large freight locomotives and five-passenger units for the Chicago, Milwaukee & St. Paul Transcontinental electrification. Two contracts for more than eighty locomotives were executed for the New York Central and fifteen of the modern streamlined high-speed passenger locomotives for the New York-Washington Pennsylvania Railroad electrification, and many others. Electric locomotives

tives have been built at this plant for all parts of the world, including Canada, Mexico, Brazil, Chile, Cuba, Japan, India, China, France, Russia, and Spain.

Another important building is the plant used for manufacture of refrigerator cabinets where three thousand refrigerators are produced in a single day. In connection with the manufacture of refrigerator cabinets, due to the seasonal character of the product, it is necessary to anticipate large spring and summer sales. For this purpose the Erie plant has provided a storage warehouse with a capacity for storing approximately one hundred thousand cabinets. Rail facilities for carload shipments are connected with this building.

The number of people employed at this plant in the early part of 1941 was about eight thousand five hundred and the total capacity of the plant is estimated at twelve thousand employees.

This plant, like most of the industrial plants of the region, at the time of these writings, is operating largely on war production.

An outstanding industry in Colonial Pennsylvania was that of paper making. To print, it was necessary to have paper; thus paper mills were established at a very early date. One was built in Roxborough in 1691 by William Rittenhouse, whose family had for several generations manufactured paper. Thomas Wilcox began a mill in Chester County in 1714 and manufactured writing paper, printer's paper and clothier's boxes. He also manufactured the paper used in making the Continental paper currency. A paper mill was established by the Germans at Ephrata, and Christopher Saur built another at Germantown. Paper so manufactured was generally marketed in Philadelphia.

The interest in publishing and printing which was so evident in Pennsylvania in the Colonial period continued as the national era opened. The number of establishments increased while the total rate of production was greatly enlarged by the improvement of equipment in the industry. At first this industry was localized in the vicinity of Philadelphia. When other materials than cloth were utilized in paper making, particularly wood-pulp, the industry became widespread, for the available supply of wood was not confined to any one locality. In 1827 the first paper made from straw was produced by William Morgan at Meadville, and the next year a plant was erected at Chambersburg for making paper from straw and blue grass. In 1830 a beginning was made in western Pennsylvania in using the fibres of lime and aspen trees.

Paper making and the manufacture of paper goods have developed as an important industry in Pennsylvania. While there has been

considerable production of rag paper, the chief interest has been in wood-pulp paper. For many years local wood was used, but in later years it has been imported from other states. In 1900 Pennsylvania was fourth among the states in the total value of paper produced. In 1934 she ranked seventh in pulp production and fifth in paper products. The manufacture of printing paper was the most important single line production. Naturally, therefore, in the printing and publishing business, closely allied with that of paper making, Pennsylvania is a leader.

This important industry is represented in Erie by the well-known Hammermill Paper Company, located in the northeastern corner of the city, and known the world over as producers of pulp, and bond, ledger, cover, safety, writing and mimeograph papers of quality.

The printing industry in Erie is represented by approximately twenty-five firms, the products of which embrace the various types of commercial and domestic printing, and include lithographing, calendars and rubber stamps.

Insulating, corrugated, and other types of paper boxes are produced by a number of firms engaged in that industry.

The former H. F. Watson Company, now the Ruberoid Company, have been large producers of asphalt prepared roofings, asbestos prepared roofings, roof coatings and paints, roofing cements, built-up roofing felts, building and sheathing papers, carpet linings, deadening felts, waterproof insulating papers, asbestos felting cement, heat resisting cement, pipe covering and boiler insulation, asbestos insulating paper, asbestos millboard, etc.

The Brown Folding Machine Company produce paper folding machinery.

The Continental Rubber Company produce a vast number of rubber products for domestic and industrial purposes, including bicycle tires; tubes and accessories; hard rubber battery containers; automobile accessories; rubber matting; tubing; hose for acid, air, air drill, creamery deck, garden, gasoline, oil conducting; baby cab tires; gaskets; oil well specialties; rubber covered rolls; special molded goods, truck wheel tires; washers; weatherstripping, etc.

The Lord Manufacturing Company produce rubber specialties, bonded rubber joints, mountings for automobiles, etc.

The Erie Foundry Company and the National-Erie Company each produce rubber working machinery.

The Lovell Manufacturing Company produce clothes wringers, rubber rolls and rat and mouse traps, and are reputed to be the largest producers of wringer rolls in the world.

The American Sterilizer Company produce sterilizers and disinfectors for hospitals, health departments, quarantine stations, etc.

Various types of electric motors are produced by the Armor Electric Manufacturing Company, as well as frequency changers in sizes one-half to 150 horsepower.

Burke Electric Company produce electric motors and generators; electric arc welding equipment; moulded insulation; insulating bushings, terminal blocks, and switchboard fittings.

Boats are produced by the National Boiler Works, Herman Lund, and Paasch Brothers, the latter also doing marine contracting.

The cigar industry is represented by nine manufacturers in the city.

The Erie City Iron Works, a very old institution, which has been mentioned in a previous chapter, produce boilers; furnaces; pulverizer equipment; scows; tanks and steel fabrications; shaking grates and grey iron castings; three-drum water tube boilers; horizontal, vertical and cross-drum water tube boilers; horizontal return tubulars; water-cooled furnaces; standard and locking type shaking grates; safety latches; steam units, consisting of a combination of the above equipment. They also design and build complete industrial power plants, including brickwork.

The Erie Hoist Company produce hand hoists; hand winches; heavy duty motor truck power winches; light power winches for trucks; light hoists (portable) for contractors; high speed construction hoists; hand cable hoists; gasoline and electric hoists; well bailing reels and scraper drag machines.

The Erie Machine Shops produce tandem steam rollers; tandem gasoline paving rollers; paper stackers; counters and markers for paper mills; asphalt mixers; sand mixers and general jobbing work.

The Erie Enameling Company produce porcelain wainscoting; steel wall tile enameled; refrigerator liners enameled; high chair trays enameled; photographic trays enameled; stove parts, pans, and trays enameled.

The Erie Foundry Company, previously mentioned, also produce steam and board drop hammers; trimming presses; forging hammers; grey iron and semi-steel machinery castings.

Henry Althof's Sons Company produce iron stairs; fire escapes; balconies; balustrades; iron and wire fences; ornamental iron work; window gratings; steel doors; sidewalk doors; folding gates; wrought iron railings; pipe railings; wickets; grilles; tool room enclosures; wire partitions; screen door grilles; coal doors; manhole covers; vases; steel settees; wire, brass and bronze work and vault doors.

Bay City Forge Company produce hammered steel forgings; crank shafts; connecting rods; shafts; spindles; discs; piston rods; rolls and heavier types of forgings made under flat dies.

Bay State Iron Works produce hydraulic machinery; hydraulic presses; rubber molds; small machine tools; punches and dies and steam engines.

American Boiler Works produce marine, stationary and portable boilers; tugs and scows; all kinds of boiler, engine and hull repairing and electric welding.

American Hollow Boring Company produce hollow bored forgings; steel shafts; clutch shafts; lathe spindles, piston rods, rams and hydraulic cylinders.

Bucyrus-Erie Company produce power shovels; cranes; railway ditchers, steam, gasoline, gas-air, Diesel and electric; and grey iron castings.

Crossley Lead & Machine Company produce net lifting machines; steam steering gears for tugs and small boats; net leads for fishermen; lead window weights; straight-tooth spur gears of steel, cast iron, brass; sheet iron pans or trays and special machinery.

C. L. Chapman Cream Separator Works produce centrifugal cream separators; toothed gears for power transmission; mechanical stokers; special iron working machinery; special tools, jigs, fixtures, etc.

Erie Art Metal Company produce steel office specialties; metal waste baskets; letter trays; ticker baskets; towel baskets; hampers; steel cash boxes; strong boxes; security boxes; sanitary receivers; book racks; costumers and clothes hangers and all-metal refrigerators.

Erie Bronze Company produce castings, red and yellow brass, copper, aluminum, bronze, manganese, acid, gear phosphor, bearing and high lead; brass and bronze bearings and bushings; die-cast parts; alloys, tin, zinc, lead, and aluminum; cored and solid bronze bars.

Erie Steel Construction Company produce structural steel for buildings; clam shell buckets; electric traveling cranes; steel loading bins; steel storage bins.

Erie Tool Works produce machinists' vises; hinged and chain type pipe vises; Stillson pattern wrenches; combination wrenches; pipe cutters; stock and dies (pipe threading); combination pliers; pipe taps and pipe reamers.

Erie Forge Company produce open hearth steel ingots; steel forgings and steel castings.

Erie Forge & Steel Company produce ingots and steel forgings.

Erie Steel Barrel Company produce steel oil drums and containers.

The Odin Stove Manufacturing Company produce gas ranges; gas room heaters; gas hot plates; gas laundry stoves; gas and coal ranges; gas burners; gas soldering iron furnaces; range boiler stands; cesspools and other plumbing specialties; floor drains; vent pipe covers and grey iron castings.

The A. Gottfried Company and the Tellers-Kent Organ Company produce pipe organs for churches, theatres and residences, and Durst-Boegle & Company, National Organ Supply Company, Erie Reed Pipe Company and the Organ Supply Corporation produce organ pipes and parts.

Erie Meter Systems, Inc., produce gasoline meter pumps for oil stations, filling stations, airports, boat liveries, etc., and motor oil systems.

Metric Metal Works of American Meter Company, Inc., produce tin and iron gas meters for either natural or manufactured gas; large volume high pressure positive gas meters; orifice meters for high pressure gas line measurements; gas line filters; limiting demand meters for three part rate; meter provers and gas apparatus of all kinds.

Griffin Manufacturing Company produce light hardware; door butts; ornamental surface hinges; strip and tee hinges; hinge hasps; garage door sets; pressed steel handles; drawer pulls; shelf brackets; corner braces; screen door hardware; cellar window hardware; garage hardware; cold rolled strip steel and narrow sheets for stamping and drawing.

Gloekler Manufacturing Company produce butchers' supplies; refrigerators; hotel and restaurant equipment; cold storage doors and cooling rooms.

Hays Manufacturing Company produce a vast number of plumbing supplies.

Jarecki Manufacturing Company produce malleable and cast iron, iron and brass pipe fittings; iron and brass valves; pipe threading machines; air compressors; governors and unloaders; oil, gas and water well supplies.

Nagle Engine & Boiler Works produce steam engines; boilers; cylindrical tanks.

Union Iron Works produce high pressure water tube and fire tube boilers; stack and tanks.

Standard Stoker Company produce locomotive stokers. Skinner Engine Company produce various types of engines.

Perry Furnace Company produce pig iron; coke and its by-products.

Adjacent to the plant of the Perry Furnace Company and on the historic site of the shipyards of the American naval officer, Oliver Hazard Perry, who, in the War of 1812, there constructed a fleet of nine vessels and, in September, 1813, captured the British squadron, writing his famous message, "We have met the enemy and they are ours," is located the plant of the Erie Concrete and Steel Construction Company.

This firm normally constructs structural steel buildings, bridges, etc. It is now entirely engaged in war production and building mine laying ships, or trawlers, a single order for which is reputed to have approximated five million dollars.

National-Erie Company produce open hearth and electric steel castings; steel cut and iron gears and machinery which serves the following industries: rubber, celluloid, chemical, insulated wire, bakelite and glass.

The Lamac Process Company produce shoe machinery and cement for repairing shoes.

Barnett Berman produces mattresses; springs; couches; folding beds and cots.

The Erie Plastics Company produce various plastic products Talon, Inc., produce hookless fasteners.

Erie Neon, Inc., produce electric signs; store fronts; bar equipment; special blown glass.

A very important industry in Erie is commercial fishing, which provides employment for a considerable number of persons. Lake Erie perch, pike and white fish are in great demand and great quantities of these fish are caught and marketed.

The excellent harbor is the scene of the unloading of many ore and grain carrying vessels.

To mention all of the industries of the city would be a difficult task and, in addition to the firms mentioned, there are numerous others, while among products not already mentioned that are produced in Erie, the following are included: wood and metal patterns, rugs, petroleum products, slag, lumber and hard woods, carbonated beverages, lenses, concrete building blocks, burial cases, burial caskets, dairy products, pharmaceuticals and toilet preparations, chemicals, spices, macaroni, candy, toys, baskets, aluminum specialties, kitchen utensils, sandstone and limestone, flour, stock feeds, various sheet metal products, dress and surgical corsets, lingerie, men's shirts, artificial limbs and surgical appliances, pencils and penholders.

Albion, Erie County, about twenty-five miles from the city of Erie, is the location of the Rogers Brothers Corporation, manufacturers of heavy duty trailers, and now on war production.

The Swanson Boat Oar Company of Albion are manufacturers of boat oars.

North East, fifteen miles east of Erie, incorporated as a borough, February 27, 1834, is in the heart of the Lake Erie grape and fruit belt. The borough is about one mile from the south shore of Lake Erie.

The Electric Materials Company and The Eureka Electrical Products Company manufacture electric products, largely of copper and brass, and both are now on war production.

The Welch Grape Juice Company produce grape and tomato juice and jellies.

Blaine Mackay Lee Company are millers of flour.

Keystone Coöperative Association are engaged in fruit processing, grapes, cherries, apples and berries.

The Sunshine Packing Corporation are engaged in fruit canning and processing, cherries, berries, and small fruits.

Todkill and Chapman are engaged in canning and the processing of fruits.

The Bernard Gloeckler Company are manufacturers of metal kitchen and galley units.

Mead & Bannister represent the feed and farm implement industries in the community.

Corry, in Erie County, is the home of the Ajax Iron Works, an old establishment, producing drilling engines for the oil fields.

The J. W. & A. P. Howard Company are the producers of the well-known Korry-Krome sole leather.

The Corry-Jamestown Manufacturing Corporation produce steel office furniture. The Aero Supply Corporation produce automobile parts and turnbuckles for airplanes.

The Raymond Manufacturing Company produce springs of all kinds and descriptions. Numerous smaller industries complete the industrial life of this city, the population of which has increased nearly three thousand five hundred since the last census, and is now approximately ten thousand. John Brown, of Harper's Ferry, one time operated a tannery there; the site is now a Memorial Park.

In Union City, Erie County, the furniture industry is quite prominent. The Standard Chair Company and Union City Chair Company produce chairs; York & Fosters, furniture; and Eastman's Manufac-

turing Company, children's furniture. Bordens Milk Plant is another important industry of this city. The lumber industry is represented by E. W. Hatch & Sons, Lyons Mill, and the Caffisch Lumber Company. Numerous other smaller industries are in successful operation.

In Warren, the county seat of Warren County, one of the important industries for many years, fabricators of iron and steel products, and nationally known for the high quality of their products, is the Struthers Wells Corporation, with general offices both at Warren and Titusville.

Reference has already been made to the United Refining Company, a large petroleum refinery.

The Piso Company and the Royal Manufacturing Company produce patent medicines and compounds.

Concrete products are manufactured by the United Lumber & Supply Corporation, General Concrete Products Company and Universal Concrete Products Company.

The Riverside Acid Works produce sulphuric, nitric and other acids.

Glendora Products Company are roasters and grinders of coffee and spices.

The furniture industry is represented by the Crescent Furniture Company, Paramount Furniture Company, and Phoenix Furniture Company. Lumber and timber products are furnished by the Commercial Lumber Company.

Automobile parts are produced by the Warren Gear Manufacturing Company; axes and edge tools by the Warren Axe & Tool Company; iron castings by Barnhart-Davis Company and Betts Foundry & Machine Company.

The Warren Tank Car Company build cars and parts for railroads and electric railways.

One of the large industries nationally known is the Hammond Iron Works, builders of boilers, tanks, stacks and drums.

Gas and electric fixtures are produced by Warren Lamp Company, Silver Lamp Company and Sunray Electric Company.

Metal furniture is manufactured by the DeLuxe Metal Furniture Company.

Hardware and specialties are produced by G. G. G. Metal Stamping Company and G. G. Greene Manufacturing Corporation.

Bashlin Company produce plumbers' supplies and steam fittings. Railroad supplies are produced by the Thomas Flexible Coupling Corporation; stoves, heaters and ranges by the Pennsylvania Furnace

& Iron Company; sand and gravel by the General Concrete Products Corporation and L. W. Yaegle & Son. Bookbinding and blank book making are conducted by the Schindler Bindery.

Cornices, ceilings, ventilators, furnaces, etc., are produced by Warren Sheet Metal Shop, Keystone Sheet Metal Shop, and Knapp Roofing & Metal Company.

The New Process Company, a nationally known mail order house, marketing certain high-class specialties, is a very large and important Warren establishment.

In Clarendon, Warren County, is located the Bradford Penn Refining Corporation, a petroleum refinery.

At Irvine, Warren County, the large and important plant of the National Forge & Ordnance Company is located.

Sheffield, Warren County, is the location of the Pennsylvania Bottle Company, manufacturers of glass bottles.

Listed as one of the smallest industries in the Nation to receive the coveted army-navy production award, the O'Connor Machine Company at Sheffield has won this distinction.

Kinzua, Warren County, is the home of the Sheldon Handle Products, manufacturers of wood products.

The dairy industry is also an important one in Warren County, and there are numerous small industries which have not been mentioned.

Meadville, county seat of Crawford County, is an important industrial center. David Mead and nine companions came over the Alleghenies in 1788 to settle on the broad meadows where French Creek Valley widened to admit the Cussewago. Thirty-five years earlier George Washington, representing the Virginia Company, had traversed the site on his last day out from the French fort at LeBoeuf, and had noted its advantages in his journal. The community was attractive to New Englanders, and much of the early growth came from that region. Only twenty-seven years after its settlement the town founded Allegheny College, the first college west of the Alleghenies and north of the Ohio. In this founding the Meadville Society for the Encouragement of Manufactures and Arts, organized in 1807 and parent of the present Chamber of Commerce, had an important rôle.

Mention has already been made of the invention at Meadville, in 1827, of straw paper; the first brick church north of the Ohio was erected there; the first teachers' institute of Pennsylvania in 1840; the first primary election in the United States, 1842; the world's first

fraternal insurance society, 1868; the world's first fraternal children's home, 1872; these are among the city's firsts.

A Meadville business man, James Densmore, was responsible for the development of the first successful typewriter in 1868, and in the later nineties and early 1900s another Meadville citizen, Colonel Lewis Walker, played a strikingly similar part in the development of the slide fastener, as has previously been related. The Meadville Chamber of Commerce is said to be the third oldest civic body in the United States.



Plant of American Viscose Corporation, Meadville

The main office and factories of Talon, Inc., the world's largest manufacturers of slide fasteners, are located in Meadville. This firm employs over four thousand persons and sends its product to other manufacturers for application and to retail stores for direct sale.

The Meadville plant of American Viscose Corporation, employing over two thousand persons, manufactures Seraceta crown-tested rayon. The first unit was started in 1928, the second completed in 1938.

The old parlor stereoscope of the nineties, manufactured by the Keystone View Company of Meadville, has become the delicate telebinocular used in industry for testing the eyes of employees, by optometrists for eye exercises, and in schools and colleges for instruction by visual education.

Metal cutting tools designed and made by McCrosky Tool Corporation of Meadville are standard equipment with manufacturers of automobiles, tractors, airplanes, machine tools, farm machinery, etc. McCrosky "Cost Cutting Tools" have been justifying the slogan for over thirty-five years.

The Barrett Machine Tool Company makes massive machines for boring and finishing metal castings. Some of their machines weigh several tons, but are adjustable to the finest work. Barrett machines, designed and built to order, have been sent everywhere.

The Meadville Malleable Iron Company manufactures a wide variety of special formula castings for agricultural implement manufacturers and other fabricators. This firm enjoys a reputation among plant production men for quality castings.

The Champion DeArment Tool Company makes hammers, pliers, pipe wrenches, automotive and battery tools, nippers, pincers, chisels, wrecking bars, blacksmith's anvil tools and tongs, and a complete line of farrier's tools. Champion tools are drop forged from special analysis steel.

The Meadville plant of the National Bearing Metals Corporation makes bronze castings for engine builders, machine shops, machinery builders, railroads, steel rolling mills, sugar mills, and other manufacturers in the United States. Capacity is one million pounds per month.

Yost vises, manufactured in Meadville, are preferred by railroads, machinists, toolmakers, plumbers, wood workers, and craftsmen everywhere. Each part of a Yost vise is machined to close limits, assuring rigidity, gripping power, long service.

The main line of the Erie Railroad taps sources of raw materials and provides splendid distributive facilities, and in Meadville maintains its locomotive repair shops and its manufacturing operations.

The Bessemer & Lake Erie Railroad gives direct access to the bituminous coal fields and Lake Erie ports.

Other Meadville industries include the Thompson Manufacturing Company, acid pumps and hand tools; Davenport Manufacturing Company, fans and blowers; Williams Manufacturing Company, non-ferrous castings; the Quay Hoop Mill; the Beman Automatic Oil Can Company; the Meadville Pennsylvania Distilling Company; the LaCoeur method for permanent waving, 1941 grand prize winner at the International Beauty Show; LaMar and Enchante cosmetics and beauty creams.

The city has two airports; one municipal, one private commercial; four hotels, 347 rooms; two hospitals; two newspapers, one morning

and one evening; four theatres and auditoriums, seat 3,415; three banks and trust companies. Population, 1940, 18,919; assessed valuation (fifty per cent. value), \$11,171,695; street mileage, 40.41; paved, 34.95; twenty-one churches; number of employees in industry (May 1, 1941), 8,732; capital invested, \$21,682,600. Value of products, 1940, \$30,836,350; annual payroll, 1940, \$11,282,580; car loadings, 1940, 6,025.

At Saegerstown, six miles from Meadville, are Baldwin Laboratories, makers of Dwin, the original scented insecticide, and Dwinax; and the Saegerstown Mineral Water Company, makers of the famous Saegerstown old style ginger ale and other carbonated beverages.

At Cochrannton, eleven miles from Meadville, are the H. C. Moore Company, nationally known manufacturers of advertising specialties in metal, and the Drafto Company, makers of portable drafting boards.

At Cambridge Springs, about fourteen miles from Meadville, are the Carnation Milk Company, a milk plant, and Hoppenstand Manufacturing Company, a new industry now one hundred per cent. on war production.

Both Saegerstown and Cambridge Springs have for many years been very popular health resorts and recreational centers. The Hotel Rider, at Cambridge Springs, built by W. D. Rider, a prominent business man of Franklin, about a half century ago, was reputed to have been the finest hotel between New York and Chicago. For some years later the building was used as a Polish college and a few years ago it was destroyed by fire. The Riverside Hotel is now a favorite health and recreational resort in Cambridge Springs.

Following the destruction of the former Hotel Rider Building, the college, known as Alliance College, was reestablished in a group of fine, modern buildings constructed and especially adapted to meet the requirements, wherein it still functions successfully.

A former popular Cambridge Springs hotel, the Bartlett, is now being used exclusively for housing the personnel of the Fraser-Brace Engineering Company, the contracting firm engaged in building the Keystone Ordnance Works near Geneva.

G. A. Freyermuth & Son operate two feed mills in the county, one at Cochrannton and the other at Atlantic.

This community has long been very important as a dairy center; agriculture and dairying add approximately \$9,000,000 annually to the purchasing power of the district.

At Spartansburg, Crawford County, are located the Tauber Woolen Mill and the Morgan Lumber Company, operating a sawmill.

Near Geneva, Crawford County, there is nearing completion at this writing of the new \$10,000,000 TNT plant being constructed by the government.

This immense plant, embracing a twenty-five square mile tract, known as the Keystone Ordnance Works, will be owned by the government and operated by a private interest. About ten thousand men have been employed in the construction of the plant, the operation of which will afford employment for about two thousand workers.

The location of this great plant came to the people of the locality as a sort of a mixed blessing. On the one hand there has been unprecedented business and employment in the quiet communities of Geneva and Conneaut Lake, approximating "boom-town" proportions.

On the other hand, there have been grief and reluctance among almost two hundred farm families which have been forced to leave homesteads and farms they have occupied for generations, and seek new land at a time of rising prices and values. In addition, there has been the problem of transporting live stock, feed and equipment. "Though many of the families are broken-hearted at leaving their old homes and friends, they are resigned to the situation and are accepting the loss as one of the misfortunes of war," said James F. Gehr, farm security supervisor, with headquarters in Meadville. The War Department and the Farm Security Administration discussed the various problems with farmers at a meeting, and the Farm Security Administration has arranged loans for purchases of new farms and to help pay moving expenses.

Typical of the sacrifices of some of the farmers is the case of Mrs. G. L. Bradley and her son, Lloyd. The Bradleys had particularly bad luck. In the summer of 1941 they began building an eight thousand-bushel apple storage building and it was just about completed when news came that the army needed their farm. Like the other farmers, they had a problem of transporting their feed, having more than one thousand bushels of corn on hand.

John Butcheck, a neighbor of the Bradleys, who also had to move, bought his farm ten years ago and had it nearly paid for. At first he couldn't get more than twelve bushels of oats to the acre, but he had the farm developed to a point where he was getting forty bushels.

And so what was once a peaceful farming section has now been converted into a great plant for the production of materials for war.

The plant will make explosives from toluol (or toluene) a by-product of coke production.

Of outstanding interest in Pennsylvania local planning and zoning is the establishment of the Crawford County Zoning Commission in

December, 1941. Crawford County is the second county in the Commonwealth to take advantage of the zoning enabling legislation which was passed in 1937. The only other Pennsylvania county having a zoning commission is Bradford County, where a zoning ordinance has not yet been enacted.

Appointment of the Crawford County Zoning Commission was occasioned by the beginning of the TNT plant. It was expected that during the construction of this great factory the peak employment of ten thousand workers would cause serious housing difficulties, with the usual sanitation problems, in Crawford County as well as in the adjoining areas. By guiding land use through the enactment of a zoning ordinance, it is hoped that permanent difficulties occasioned by this temporary boom can be minimized.

In view of the acute nature of these problems and their long-term effects upon this area, Governor Arthur H. James authorized the Pennsylvania Department of Commerce and the State Planning Board to assist local officials in every way possible in meeting this emergency. Conferences were held in Meadville, attended by the county commissioners, the members of the newly appointed zoning commission, as well as by Clinton Stark, field representative of the Department of Commerce, F. A. Pitkin, executive director of the State Planning Board, and Russell V. N. Black, consultant to the State Planning Board.

Other communities in Pennsylvania which are experiencing rapid population shifts due to defense activities may well profit by the example set by Crawford County.

Titusville, Crawford County, near which city the petroleum industry had its birth, is still prominently identified with that great industry. Mention has already been made of the Cities Service Oil Company refinery in that city. The Pennsylvania Refining Company, lubricating and motor oils and other refined oil products, is another Titusville firm.

The Struthers Wells Corporation, embracing the Titusville Forge Company, Titusville Iron Works Company, and the Struthers Wells Corporation of Warren, is a very important industrial organization. Normally producing steel forgings, crankshafts and connecting rods, and oil well supplies; gas and steam engines, oil field boilers, firebox and H. R. T. boilers for heating and power; tanks and stills, steam pumps, gas separators, safety and vacuum valves for stills, this firm is now working one hundred per cent. on war production.

Universal-Cyclops Steel Corporation, producing high speed, alloy and carbon tool steels, and heat resisting and non-corrosive castings, are also engaged in war production.

Charles Horn Silk Company produce silk ribbon. Queen City Cutlery Company produce pocket and penknife cutlery, carbon and stainless steel cutlery; this firm is now working on war production.

Jamestown Specialty Company produce canoes and light water craft. Marsh Gauge Pole Company is one of the few concerns in the country making gauge poles; they make gauge poles for oil and gasoline and tank cars.

The Pringle Powder Company and the Otto Cupler Torpedo Company make explosives.

Thompson Medical Company make patent medicines. East Titusville Mills are manufacturers and jobbers of feed and flour.

Titusville Tank & Construction Company produce steel tanks, pumping jacks and steel plate work; now engaged in war production.

The lumber industry is represented by Fisher & Young, Jackson & Ludwick, and the Davison-Fogle Lumber Company.

Allied Barrel Company produce barrel staves. Crone's Repair Shop is now engaged in war production. A. J. Robinson is a mail order company selling wallpapers, paints, varnishes, etc.

Titusville Dairy Products Company produce various dairy products.

Titusville is the center of a fertile farming area, and is the second largest buckwheat region in the United States. Dairying is also an important industry, with herds having a wide reputation.

The city has twenty-one churches; two theatres, one of which is said to be one of the finest small city theatres in the State. Its excellent schools are supplemented by four free kindergartens.

Sharon, Mercer County, is a very important industrial city. Sharon adjoins the boroughs of Farrell, Sharpsville, and Wheatland, which together form an industrial unit. Iron and steel production and the fabricating of iron and steel products are the most important industries.

The Sharon Steel Corporation produce strip-cold rolled and stainless steel.

The Sharon Tube Company produce butt-weld steel pipe, one-eighth to three-eighths inch. The Wheatland Tube Company (Wheatland) produce butt-weld steel pipe, one-half inch to three inch.

Westinghouse Electric & Manufacturing Company produce electric transformers.

Shenango Penn Mould Company (Sharpsville) produce ingot moulds. Shenango Furnace Company (Sharpsville) produce pig iron.

Sharpsville Steel Fabricators, Inc. (Sharpsville) produce tanks, pumps, motors and gas station equipment.

Petroleum Iron Works Company produce steel drums. Sawhill Manufacturing Company (Wheatland) produce structural pipe.

Sharon Hardware Manufacturing Company produce garage door track, hinges, hasps and hardware.

Sharon Pattern Works make wood patterns. Nufer Cedar Company (Wheatland) produce wood boxes, etc.

National Malleable & Steel Castings Company produce steel castings, car couplings, car trucks, anchor chains, cast steel car wheels.

Mercer Tube & Manufacturing Company produce butt-welded steel pipe, three-quarter inch to three inch.

General American Transportation Company (Masury) produce tank cars, etc. Fessler Machine & Engineering Company are a jobbing machine shop. E. S. Frantz Machine Company do light machine work.

Grafo Colloids Corporation produce automobile lubricants. K. L. Dunbar Company (Wheatland) produce paving materials. Air Reduction Sales Company produce oxygen.

Coca-Cola Bottling Company, J. S. Herrmann Bottling Works and Nehi Bottling Company all produce soft drinks. J. D. Biggin & Sons Company, Mott Robertson and Ray J. Deneen (Sharpsville) produce milk products. George & Thomas produce ice cream cones.

Carnegie-Illinois Steel Corporation, Farrell Works (Farrell) produce pig iron, tin plate and open hearth steel.

Numerous other smaller industries add to the industrial life of the city and the busy Shenango Valley.

Sharon has fine churches, schools and hospitals and is a very progressive city. United States Senator Davis is a former resident of the city.

Greenville, Mercer County, is the location of the shops of the Bessemer & Lake Erie Railroad, where all repairs for the Bessemer and the Union railroads are made. The Bessemer & Lake Erie Railroad is reputed to be the leading carrier in the world for the tonnage hauled per mile of track.

The Greenville Steel Car Company manufacture steel freight cars of all types, and are now manufacturing pre-fabricated ships in sections, shipped from there to ship yards for assembly.

The Chicago Bridge & Iron Company manufacture steel tanks, chiefly for oil and water storage, including the Horton sphere tank.

Another large industry, The Diceler Corporation, has recently been organized with new capital and new management. Previously its field was the manufacturing of refrigerator units. Its present management has as yet had no opportunity to convert its production to present-time activity.

Numerous smaller industries contribute to the industrial activities of the city.

Greenville is the home of Thiel College, an institution of the Pittsburgh Synod of the Evangelical Lutheran Church. It began its existence in Monaca, Beaver County, Pennsylvania, and owes its existence to A. Louis Thiel, who bequeathed most of his property to the endowment of an institution for higher Christian education in 1866. The Legislature of Pennsylvania granted it a charter with college powers and the property was transferred to Greenville, where the college was opened on September 1, 1870. It is a coeducational institution with an average enrollment in recent years of between 250 and 300 students. It now has under construction a girls' dormitory designed to accommodate 110 students. Dr. William F. Zimmerman was recently named president of the college, coming there from Fremont, Nebraska, where he was dean of Midland College.

Grove City, Mercer County, contributes largely to the production of this important industrial region.

As one of the Nation's foremost builders of gas and Diesel engines and compressor equipment, The Cooper-Bessemer Corporation maintain large plants at Grove City and Mount Vernon, Ohio. Branch offices and warehouses, strategically located throughout the country, efficiently serve the hundreds of marine, industrial, municipal, and oil-and-gas-industry users of its products. The factory at Grove City is extensive, covering more than ten acres, and equipment therein is of the very finest for the production of precision-built engines ranging in size from twenty-five to 1,650 horsepower. Some idea as to the size of the Grove City plant may be had from the fact that its foundry has a capacity of two million six hundred thousand pounds of castings per month, while twenty-seven traveling cranes, of one to thirty tons' capacities, assure easy handling of heavy materials. The number of employees during normal business periods is in excess of one thousand six hundred skilled, clerical and engineering workers, many of whom are drawn from the schools and colleges of Grove City and vicinity. At the time of this writing, this great plant is entirely on war production.

The McKay Body Works build a varied line of bus and truck bodies.

Wendell August Forge produced hand forged aluminum grills, gates, balconies, and also high grade aluminum hand-wrought specialized gifts sold through leading jewelry and department stores throughout the country. Due to inability to obtain material, this business was discontinued in the fall of 1941. The plant has been remodeled to serve as a barracks for enlisted personnel of the United States Navy and Coast Guard undergoing training in Diesel engine operation and maintenance at the Cooper-Bessemer Corporation plant. A mess hall and kitchen are now being erected on land adjoining the plant.

Two other firms, Arthur Armour and Palmer-Smith Company, were producing products similar to those of the Wendell August Forge and have, likewise, been handicapped by inability to secure required material.

Arthur Armour is operating on a limited scale, making up small articles, and as yet has no plans for continuing to operate as heretofore or in some new line. Most of this work was hand work and the men have in most cases gone into other work. The plants have no machinery that can be utilized in war production.

Palmer-Smith Company has moved to land in Pine Township, near the borough limits, in a new building they have purchased. This firm has discontinued the manufacture of aluminum articles and now makes fine Irish linen table cloths, etc. They also anticipate some form of wood novelty manufacture.

The Grove City Creamery began operations in 1915. It was then locally owned, but was leased for many years to the United States Department of Agriculture as an experimental commercial dairy plant. During government operation many experiments were conducted leading to improvement in manufacture of Swiss, Roquefort and Camembert cheese. The government gave up their lease about 1930. The corporation operated the creamery, manufacturing butter, cheese, etc., and marketing milk locally and to Pittsburgh milk marketers until August 1, 1936, when the creamery was sold to the Borden Company. This firm used the plant chiefly as a milk depot, doing very little manufacturing, and sold the plant to Lewis Dairies, Inc., in August, 1941. The Lewis Dairies distribute milk locally, and use the plant as a source of supply for their Pittsburgh dairy business. At the local plant they manufacture butter, ice cream and cottage cheese for the local and Pittsburgh markets. The creamery since its

inception has afforded a good market for milk produced locally and has been a large factor in building up the nearby farming industry as a dairy farm district and has contributed to the financial success of many nearby farmers.

G. A. Freyermuth & Son operate a feed and flour mill in Grove City. This mill is about one hundred years old and is one of the few now being operated by water power. This firm has eight mills, five of which are located in Mercer County, the four additional to that in Grove City, all feed mills, are located at Greenville, Sandy Lake, Hadley, and Fredonia, the latter being the headquarters of the firm.

The Machine Shop Equipment Company, the Lawrence Foundry, the Grove City Brass & Bronze Company, the Heat Exchanger Company, and L. M. Stevenson Machine Shop produce a wide line of gasoline engine air compressors, oil and gas well supplies, bronze, brass, and gray-iron castings, and electric plants for farm lighting purposes; also all types of heat exchangers.

The William Bashlin Company manufacture linemen's equipment. Montgomery Broom Company and the G. C. Broom Company produce brooms. Thousands of bags of coffee and nuts are roasted by the George J. Howe Company. Mirrors are manufactured by the Beauty-Clear Mirror Company.

Grove City College, a coeducational liberal arts college is located in the heart of the town. The college began in 1876 as a private school headed by Dr. Isaac C. Ketler with thirteen students. The first class was graduated in 1881. Since that time the school has grown to a present enrollment of about one thousand students. The college is fully accredited by the Association of American Universities, the American Association of University Women, the Middle States Association, and the Department of Public Instruction of the Commonwealth of Pennsylvania.

Since 1930 the college has completed six new buildings on the upper campus, consisting of Harbison Chapel, the Hall of Science, Ketler Dormitory for men, Lincoln Hall, a dormitory for men, the Mary Anderson Pew Dormitory for women and Crawford Hall, which is the new administration building and auditorium. Construction of an addition to the Mary Anderson Pew Dormitory was completed in 1941.

All buildings and landscaping follow plans of nationally known landscape architects, and are developing a campus of great natural beauty. Investment in new college buildings since 1930 has been well over \$1,000,000.

Station WSAJ, owned and operated by Grove City College, is one of the oldest broadcasting stations in the United States. The first broadcast was a talk given by President W. C. Ketler in April, 1920, although experiments had been conducted as early as 1913. It is housed in a soundproof studio in the Hall of Science of the college. Programs are presented three times a week during the college year.

At this writing, the college is being used in part as a naval training school, where three hundred men from the navy and marine corps are receiving training in radio work. The college is also training men from the army and navy in a civilian pilot training school.

Grove City has a municipally owned electric light plant, equipped with Diesel engines, costing over \$400,000, which supplies adequate power and light at reasonable rates. The city also owns and operates its own water plant with a daily pumping capacity of five hundred thousand gallons from artesian wells, with necessary filtration and softening plant capable of supplying a city of twenty thousand population. It also has a complete sewage disposal plant.

Over 250 acres of city park area is owned by the city. This area is equipped with a fine municipal swimming pool, four tennis courts, two athletic fields, a children's playground, large picnic sheds, and abundant acreage for additional recreational purposes.

The Grove City Country Club, located a mile and a half south of the town, comprises a golf course, tennis courts, a lake with excellent bass fishing, swimming and boating, picnic grounds and clubhouse.

Two banks serve the community, The Grove City National Bank and the First National Bank. The banks have played a great part in the development of the community, and a number of unique service features have been inaugurated, particularly in encouraging thrift, assisting farmers in developing the dairy industry, and in assisting the people of the town in selecting proper investments.

On July 8, 1942, ground was broken at Transfer, Mercer County, for the Shenango Personnel Replacement Depot of the United States Army.

Although hundreds of buildings of various types have been erected on the site, at this writing the project is only about thirty per cent. complete.

The construction force now at work is near the peak, with four thousand two hundred men employed, Major W. C. Sale, army engineer in charge of the project, reports. He explained that the problems of housing and labor supply will not be as great as at first anticipated. When ground was broken, it was expected that a peak of more than six thousand would be required by late fall.

The factor in reducing the number of men employed was the employment of a ten-hour six-day work program, and the careful scheduling of work so that no enormous peak is required at any one time, with consequent lay-offs at other periods.

The number of troops to be housed at the replacement depot has been doubled since construction began—and the figure is not announced—only a month has been added to the deadline for the completion of construction, which is now March 1, 1943. The one thousand four hundred-acre tract of the camp proper has been transformed already from meadows and fields to the likeness of a small city.

Four nearby communities are recognized in the naming of the four theatres on the project, which will be the "Greenville," "Sharon," "Transfer," and "Mercer."

The camp layout corresponds to city blocks, upon which row after row of frame barracks front. The main travel roads are designated by letters of the alphabet, and are crossed by a score of parallel streets. All barracks and other buildings will be numbered for easy identification on the part of incoming soldiers, who will occupy them, and by service units. All mess halls will be designated by the number "45," so that building "1045" would mean the mess hall on Tenth Street.

A total of twenty-four subcontracts has been let by Mellon-Stuart Company, the general contractors, to include recreation buildings, theatres, chapels, office buildings, roads, plumbing, inside and outside electric wiring, wells, water lines, and water storage tanks. The Mellon-Stuart Company is building the barracks and much of the other work under its prime contract. Present work is centering on the construction of utilities, although a recent storm filled in some of the trenches dug for sewer and water lines, temporarily impeding the work.

And thus has war brought a great change to a former quiet and peaceful region.

Mercer, county seat of Mercer County, is the home of the Reznor Stove Company, manufacturers of the well-known Reznor heaters and also the Mercer Silk Mills, originators of mercerized thread, which bears the town's name. Another industry in the town is the manufacture of brooms.

In Clarion, county seat of Clarion County, is located the glass plant of The Owens-Illinois Company.

At Knox, a few miles from Clarion, is the Knox Glass Bottle Company, large producers of glass containers. At Climax, The Climax Fire Brick Company operate two large plants.

The Rex-Hide Company at East Brady produce brake linings and similar products, with rubber as a basic material. This plant is now on war work.

Lumber, once so very important in this county, is still produced to some extent. The C. E. Andrews Lumber Company, of New Beth-



Downtown Business Section, Clarion

lehem, are producers of store and office fixtures, building the equipment for the G. C. Murphy Company among other customers.

Other manufactures in the county include fire clay products and mining is extensive. In mining the chief products are coal, fire clay, gas and oil. The coal business is very active, much coal being mined by stripping operations and shipped to lake ports for export to Canada, in addition to the nearer domestic and industrial users. Natural gas is found throughout the county, and is now produced and sought after more than oil.

Excellent quality flint clays are found in the county and there are tile and building block plants making clay products.

In general, Clarion County is agricultural and mining, with some associated industries. The agricultural products center about the

dairy industry, milk being the largest money crop. Many herds of pure bred cattle exist, the Guernsey breed being most favored, though there are some Holsteins. Many pure bred Guernseys are sold annually to breeders in the southern and eastern sections of the State. This county is regarded as a source of supply by buyers of such cattle to replenish their herds. Raw milk goes to the Pittsburgh market.

The poultry business is also another agricultural producer of farm income, and a few farmers raise beef cattle also.

Brookville, county seat of Jefferson County, has the Brookville Locomotive Works, producers of gasoline and Diesel powered locomotives. Brookville Body Manufacturing Company produce truck bodies, bus bodies, etc. Deemer Furniture Factory produces all kinds of wooden furniture. Brookville Glove Company are makers of canvas gloves. Another industry is the Humphrey Brick & Tile Company; also the Brookville Dairy & Ice Cream Company.

Reynoldsville, Jefferson County, is the home of the A. T. McClure Glass Company, manufacturers of mirrors. In that department the firm started in 1929, but the A. T. McClure Glass Company originated in 1908, founded by A. T. McClure, who had been manager of the Star Glass Company, who had to quit business on account of the competition of the larger companies, at the age of fifty years. He is still living, although not active in the business, is its president and takes a very great interest in the operations of the company. In 1928 the firm started a branch at Altoona and, in 1937, another one at Johnstown, Pennsylvania. In addition to the manufacture of mirrors, the firm job structural glass, hard surfaced floor coverings, insulation board and wool, roofing and paint; also plywood. Representative stocks are carried at their branches as well as at Reynoldsville.

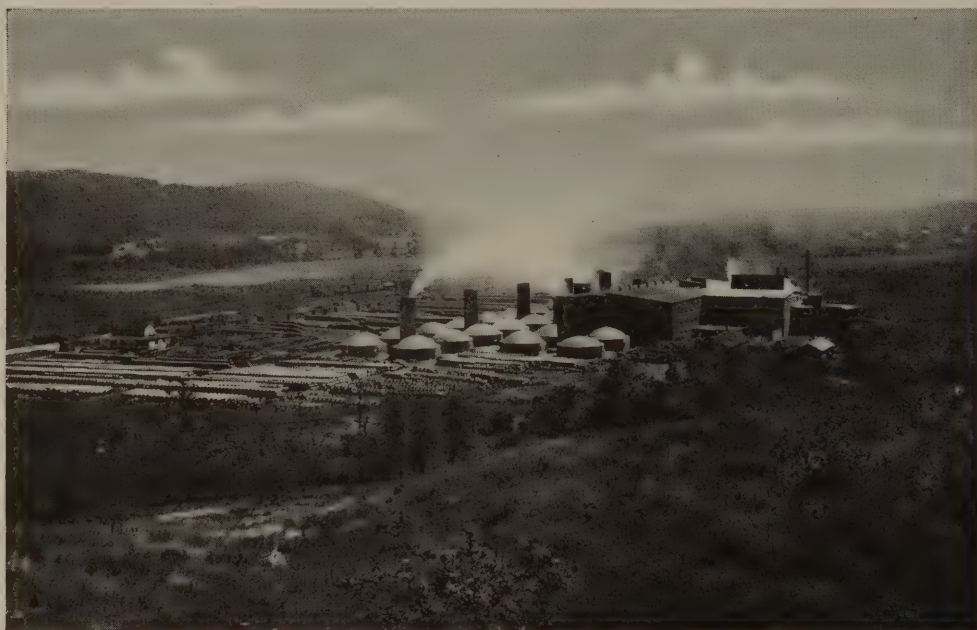
Another important industry of this town is the Pennsylvania Burial Case Company, recognized as among the leaders in the funeral supply field. This firm produces wood caskets and is semi-manufacturer of metal caskets. The firm employs an average of fifty people, has annual gross sales of approximately \$300,000, and payroll of about \$85,000.

The Guarantee Silk Company, Inc., have been in business since 1919 and operated in Paterson, New Jersey, until 1935, when the business was moved to Reynoldsville. Previous to the war this company manufactured all silk fabrics for the dress, underwear and lining trade and is now using rayon only.

The Judy Textile Corporation produce rayon products, with the latest automatic looms, catering to the dress and underwear trade, and employ about eighty-five persons.

Another Reynoldsville industry is a macaroni factory and another makes a rerailer that has a market in many foreign countries as well as generally throughout the United States.

The town owns a tract of land on which the Pennsylvania Railroad has siding tracks and which is available as free sites for industries.



Brockway Clay Company, With Brockway in the Distance

Jefferson County is important in agriculture and dairying and the county has a Guernsey Cattle Association, as has also Clarion County.

Clearfield, county seat of Clearfield County, is in a rich coal and clay region. Harbison Walker Refractories Company, Clearfield Clay Products Company and Paterson Fire Brick Company are all large brick manufacturers.

The Elk Tanning Company are producers of shoe leather. Johnson Machine Company produce general machines and fire brick moulds. Clearfield Machine Company produce foundry machinery.

Kurtz Brothers are large producers of school supplies and manufacturing stationers. Clearfield Sportswear Company produce sports-

wear. Workman's Overall & Shirt Company produce overalls and shirts.

Robinson Clay Products Company produce sewer pipe. Peale, Peacock & Kerr represent the coal industry.

The Engineering offices of the Pennsylvania Department of Highways for District No. 2, embracing the counties of Clearfield, McKean, Potter, Elk, Cameron, Clinton and Centre are located in Clearfield, and the maintenance garage and superintendent's office for the district are located a few miles from the city. Employment, both in the engineering offices and in the maintenance garage, varies considerably depending upon the season of the year and the extent of highway construction and improvement. The number of employees in the engineering offices will vary from 125 to 200, and in the maintenance garage from 100 to 300.

Clearfield Taxidermy Company are producers of fur coats. Clearfield Textile Company produce silk plush.

Curwensville is the location of the North American Refractories Company, manufacturers of brick; the Franklin Tanning Company, producers of leather, and the Erdette Hosiery Mills, producers of ladies' hose.

DuBois is the location of the extensive Baltimore & Ohio Railroad shops, producing locomotives, freight cars and railroad supplies.

Osborn Machine Company operate a machine shop and foundry and produce machine tools. Pittsburgh-DuBois Company produce gas meters. DuBois Electric Storage Battery Company produce electric batteries. Vulcan Soot Blower Corporation produce mechanical soot blowers.

Jackson China Company produce vitrified china, pottery earthenware. DuBois-Falls Creek Brick Company produce bricks. John A. Kohlhepp Sons produce concrete blocks. Swack Fertilizer Company produce fertilizer.

G. W. Pifer Sons, Symers Planing, Incorporated, Soult Lumber Company and Briggs-DuBois Forest Products Company all are producers of lumber.

Beaver Meadow Creamery, V. T. Smith Dairy and DuBois Dairy all produce dairy products.

DuBois Optical Company produce optical glass. DuBois Milling Company produce flour. DuBois Brewing Company produce beer and ice. Crystile Ice Manufacturing Company produce ice.

Gray Printing Company and Commercial Printing Company each produce catalogues, books, etc. Nelsons Furs produce furs. Caro-

lina Coca-Cola Bottling Company and the Nehi Bottling Company produce soft drinks.

Triangle Automobile Spring Company produce automobile springs.

Numerous smaller industries make up the industrial life of this busy city.

In Cameron County, the one time extensive lumbering industry is still carried on to some extent, while in Emporium, the county seat, or immediately adjacent thereto, there are a number of important industries.

Sylvania Electric Products, Inc., are manufacturing and have always manufactured radio tubes and kindred articles; they have a world-wide reputation, and are at present engaged in manufacturing, almost exclusively for war work, the same line. They employ approximately three thousand persons.

Keystone Tanning & Glue Company, Elk Division, are manufacturers of sole leather; have been engaged in this business for many years. They employ about one hundred persons, and are engaged practically one hundred per cent. on war work.

The Pennsylvania Powder Company are manufacturers of high explosives, for mines principally, and nitroglycerine for well shooting. This firm has been in business for many years. They have about seventy-five employees and are now engaged largely in war production.

Cameron Manufacturing Corporation manufacture manicure and pedicure instruments normally, but at present are engaged in manufacturing surgical instruments for the government exclusively. They have been in business about three years and have about one hundred employees.

Forest County, in the early days, was a very important lumbering region and that industry was extensively carried on by the Wheeler & Dusenbury interests until recent years, when they removed to the Western States.

The Endeavor Lumber Company at Endeavor, and the Jamieson Lumber Company at Tionesta, the county seat of Forest County, are now actively engaged in this business.

The glass industry is represented in the county by the Marienville Glass Company at Marienville.

At Mayburg, Forest County, is located the Mayburg Chemical Company, producing chemicals from wood products.

Ridgway, the county seat of Elk County, situated on the Clarion River, at the mouth of Elk Creek, was prominently identified with the early tanning industry, which was a principal industry in Elk County.

This section has extensive natural gas wells, coal mines and clay pits. It is an important shipping point, especially for lumber. The borough is on the edge of the Allegheny National Forest. Ridgway was founded in 1824 and incorporated in 1880.

The Keystone Tanning & Glue Company are manufacturers of leather; have machine shops, etc.

Elliott Company are manufacturers of motors, etc. Molded Materials, Inc., a subsidiary of Stackpole Carbon Company of St. Marys, produce brake linings. The Hyde-Murphy Company are engaged in the lumber and mill work industry.

St. Marys, a borough of Elk County, is built on a plateau of the Allegheny Mountains, a few miles east of the Allegheny National Forest. It is a shipping market for coal, clay, farm and dairy products and also has important industries. St. Marys was founded in 1842 and incorporated in 1847.

Stackpole Carbon Company, Speer Carbon Company, Keystone Carbon Company, St. Marys Carbon Company and Pure Carbon Company each produce carbon products. The Stackpole Carbon Company and Speer Carbon Company also produce radio parts, and the latter electrodes also.

The National Molded Materials Company produce bearings, etc. St. Marys Sewer Pipe Company and St. Marys Clay Products Company each produce sewer pipe.

Elk Fire Brick Company, a subsidiary of North American Refractories Company, produce fire brick.

Sylvania Electric Products, a subsidiary of Hygrade-Sylvania Corporation, produce electric lamps.

Builders & Manufacturers Supply Company produce lumber and building materials. Corbett Cabinet Manufacturing Company produce lumber, building materials, and fine wood products.

Armour Leather Company produce leather. Elk County Dairy Products Company produce dairy products.

The Pittsburgh, Shawmut & Northern Railroad Company shops, etc., are located at St. Marys.

A Benedictine Academy for Young Ladies was located at St. Marys, where the first Benedictine convent in America was established, in 1852.

At Johnsonburg the Stackpole Carbon Company have a plant producing carbon products.

Also located at Johnsonburg is the Castanea Paper Company, a subsidiary of the Curtis Publishing Company, producing printing paper.

At Wilcox is located the Wilcox Tannery, producing leather.

The Shawmut Mining Company of St. Marys have various coal mines in the southern portion of the county, and Sylvania Corporation are engaged in drilling gas wells.

Smethport, county seat of McKean County, located in an important farming and lumbering region, as well as petroleum and natural gas, also has other diversified industries.

Just five miles from the borough, at Farmers Valley, is located the McKean plant of the Quaker State Oil Refining Corporation, which has been previously mentioned. Many of the residents of Smethport are numbered among the approximately three hundred employees of this important refinery. Many others are employed as drillers and lease workers in the oil fields of that locality.

The McKean County Maintenance Division of the Pennsylvania Department of Highways, which has its offices and garage in Smethport, gives employment to a considerable number of persons.

Holmes & Gilfillan are dealers in lumber, builders' supplies and coal, and manufacturers of "Backus Spot-O-Matic Pinsetters" for bowling alleys.

Backus Novelty Company are manufacturers of locking check systems for coats, hats and umbrellas; also cases for "Zippo" lighters. The plant is now on war production.

Smethport Specialty Company are manufacturers of "magnetic" toys in normal times; now engaged in war production.

Unicorn Manufacturing Company are manufacturers of toys in normal times; now suspended for the duration of the war.

Wood chemical plants in the vicinity of Smethport employ large crews of men to cut the wood, truck it to the factories and man the plants. The Crosby Chemical Company is located at Crosby, five miles from Smethport. Bradford Wood Products Company is located at Marvinsdale, nine miles from Smethport. Norwich Chemical Company is located at East Smethport. This firm purchases products of the wood chemical plants and produces radiator alcohol (anti-freeze), etc.

A number of coal mines are operated at Clermont, Mt. Alton, Cyclone and other points near Smethport. Shafts are dug at some of the mines, but much of the coal is obtained by strip-mining with the use of power shovels.

Several companies in Smethport and vicinity are engaged in the production and distribution of natural gas. The franchise in Smethport is held by the Smethport Natural Gas Company, a subsidiary of

the United Natural Gas Company, which has a number of producing leases in the vicinity. The North Penn Gas Company of Port Allegheny is also a large operator in the vicinity.

A chapter in the history of McKean County, covering a span of 138 years, was written on the afternoon of June 15, 1942, when the new courthouse, built at a cost of \$358,000, and without any debt, to replace the fifty-nine-year-old structure destroyed by fire on February 12, 1940, was dedicated with an impressive ceremony witnessed by a large crowd of people and a great number of distinguished guests.

This is the fourth courthouse in the history of the county. McKean County, named for Governor Thomas McKean, and set apart from Lycoming County, was established March 26, 1804. Smethport was established as county seat by Act of Assembly, March 4, 1807.

The first courthouse erected, amid stumps of virgin timber on a square in Smethport, donated by John Keating, at a cost of about \$5,000, was completed May 31, 1827. In 1852 the original courthouse was torn down and the second county building erected. In 1879 the second courthouse was torn down and, on September 12, 1881, the county's third courthouse was dedicated; the east wing of this building was completed in 1914 and, on November 4, 1937, the corner stone of the west wing was laid. The main building of this last structure, as previously stated, was destroyed by fire on February 12, 1940.

In 1796 John Keating purchased three hundred thousand acres for \$80,000 from the original purchasers—Robert Morris, signer of the Declaration of Independence; William Bingham; Holland Land Company (Royal Family of the Netherlands) and others. Smethport was named for De Smeths, European banking firm of the Holland Land Company.

John Keating, whose proposal for the establishment of a county seat in McKean County was accepted by the first board of trustees, was one of the most prominent men of his day in Pennsylvania. He gave to Smethport half of the squares within the limits of the borough, donated the courthouse square, gave \$500 for the first schoolhouse in the county seat and contributed 150 acres of land for support of the first school teacher there.

He was born at Adare, near Limerick, Ireland, in 1760. The family was of Norman stock, emigrating to Ireland under Henry II. They were dispossessed of their lands by Cromwell. John Keating's

father, Byron Geoffrey, fought at the battle of Limerick and was banished to France at the capitulation. Subsequently, he returned and married the daughter of Thadeus Quin, the progenitor of the Lord of Adare, to whose title was afterwards added that of Dunraven.

When John Keating was five years of age, his father moved to France in order to escape religious persecution. There he was granted letters patent of nobility by Louis XV in recognition of the title held by the family in Ireland, previous to forfeiture of their estates. Of his six sons, five entered the French Army, and one became a general and died in prison during the French Revolution.

John attained the rank of captain in the Irish Brigade, Walsh Serrant Regiment, and was awarded the cross of St. Louis, highest decoration for service to the French Crown.

After the execution of the King of France, John Keating, who was stationed in the West Indies in 1795, refused command of the forces stationed in San Domingo and resigned from the service of France because of disapproval of atrocities of the Revolution.

He came to this country bearing letters to President George Washington and others. He was immediately sought after by European capitalists to represent their interests in America and became the agent of large landed estates in Pennsylvania.

In 1796, as already stated, John Keating purchased three hundred thousand acres of land, including much of McKean County, for \$80,000 from William Bingham, one of the original purchasers at a lottery after the Six Nations Indians ceded northwestern Pennsylvania to the Commonwealth in 1784. The region was a dense wilderness in 1796, with not a single white man dwelling in or near it.

Mr. Keating came to Smethport frequently from his home in Philadelphia, a trip described by historians as requiring much more thought and exertion than circumnavigating the globe in later years.

He adopted a policy of great generosity to attract settlers to the McKean County region, granting limited quantities of land to heads of families, without other consideration than occupancy and improvement; giving contracts for sale at low prices and long terms of payment; contributing money to build roads and to establish schools and churches. No settler was ever ejected by Mr. Keating because of inability to pay for land he contracted to purchase. He was affectionately known as "Squire" Keating by the pioneers and his visits were great events in their isolated existence. He died in 1856 at the advanced age of ninety-five years.

John Keating's name is perpetuated by Keating town, which surrounds the county seat, Keating Summit, a hill and village to the south-east and several other places in that section of the country.

The first mortgage was recorded in McKean County June 1, 1827. It secured to Norry Hooker by Justice Rice two hundred thousand feet of good, merchantable pine boards, payable in 1828 for one hundred thousand feet of similar boards purchased from



Kendall Refining Company, Dubbs Plant, Bradford

Hooker that year. It is interesting to note that some early McKean County deeds, entered in the recorder's office, purport to trace land back to Adam and Eve.

Bradford, the principal city of McKean County, and the name most prominently associated with the later production of Pennsylvania petroleum, continues to hold a prominent place in the industry, both in the production and the refining of petroleum.

Mention has already been made of the Kendall Refining Company, located in the city of Bradford, while the city has many other

important industries, both associated with the petroleum industry and otherwise.

The Dresser Manufacturing Company are manufacturers of pipe couplings, packings, valves and other oil field specialties, their products being nationally known.

Both the Bovaird & Seyfang and the Bovaird & Company firms manufacture engines, powers and other oil field equipment and are also nationally known.

The Bradford Supply Company are producers and marketers of oil field supplies.

The Northeastern Container Company, in South Bradford, are manufacturers of paper cartons.

W. R. Case & Sons are manufacturers of cutlery. Hanley Brick Company manufacture brick.

Wyman Chemical Company produce chemical products from wood.

The Bradford Motor Works, Zippo Lighter Company and the C. J. Johnson Sled Company are also important industries, while there are numerous smaller industries in the city.

At Mt. Jewett industry is represented by the Mt. Jewett Foundry & Machine Company, and the Mt. Jewett Tanning Company, and International Leather Company.

Kane is the home of the Holgate Brothers Company, manufacturers of brush handles, toys and wood products. On August 10, 1942, toy production at this plant was moving at an accelerated pace following the rescinding of a government freezing order affecting lacquers, which had curtailed production since June 30.

The order was issued on August 8 and automatically will result in stepping up operations in the paint and spray departments of the toy plant, Kane's largest industry.

When the original order was issued in April, all lacquers were frozen in stock as of June 30, with the company having on hand sufficient materials to handle the toys for the 1942 Christmas season. Since that time the company has been at work developing substitutes and concentrating on a toy line for the Christmas season. The firm is very prominent in the field of toy production and, apparently, the government feels that the children of the country should have their toys as usual, with which decision most people will be in accord.

Kane Shirt Company—part of the Phillips-Jones Company—are manufacturers of shirts.

Kane Manufacturing Company are manufacturers of Venetian blinds, window sashes and war materials.

Sakura Mills, Inc., are weavers of silk and rayon products for women.

Olympic Leather Company are manufacturers of leather products, principally traveling bags and suit cases.

Moser Manufacturing Company produce iron foundry and machine parts.

Speer-Carbon Company—branch of the St. Marys company of the same name—manufacture carbon products.

Melvin Smith Laboratories are manufacturers of products for the United States Signal Corps.

Kane has been known as a health resort since 1867, when the New Thompson Hotel was originally built there.

A mineral springs pool was discovered a mile from the borough limits. As tradition has it this pool was used by the Indians. The Indians would come for many miles to carry the water from this spring in leather pouches for medicinal purposes.

Each year since 1867 health visitors and sufferers from asthma and hay fever have visited this community in expanding numbers until now the number approximates one thousand annually.

Winter sports have been increasing to a considerable extent. There have been rather large ski meets from time to time and on some occasions ski slopes have been dotted with hundreds of ski enthusiasts from New York, Ohio and Pennsylvania.

The Lobo Wolf Farm, with thirty-two wolves in the pack, was established in 1927 and has annually hundreds of visitors. The pack is located on Route 6, six miles east of the borough.

This community dates from 1859 and was organized as a borough on February 15, 1887. Railroad yards were constructed there in 1865-66 and the first train ran through there in 1867.

Sergeant Wire Glass Company are manufacturers of wire glass, located at Sergeant.

At Ludlow is located the Curtis Leather Company, a tannery. At Wilcox is located the Elk Tannery.

The Otto Chemical Company, with plants both at Sergeant and Morrison, are manufacturers of chemical products.

At Port Allegany, industry is represented by the Pierce Glass Company, Pittsburgh Corning Glass, and the American Extract Company.

The National Powder Company, at Eldred, are manufacturers of nitroglycerine, dynamite and other explosives.

The Custer City Chemical Company is located at Custer City and the Union Charcoal Company at Westline.

Franklin, county seat of Venango, the county within which the great petroleum industry had its birth, is a very old and historical city. Situated on French Creek and the Allegheny River, and surrounded by the foothills of the Allegheny Mountains, with wide streets plotted to conform to the contour of the two streams, the streets lined with stately trees, except in the business section, and immediately adjacent to the business district, a beautiful park, dedicated to the use of the people for all time, it is widely known as one of the most beautiful small cities of America.

The city was laid out by General William Irvine by order of the State in 1795 and given the name of Franklin, probably suggested by the fort of that name located there, this being one of the four Colonial forts, the sites of which are within the boundaries of the city. The building of these forts indicates the strategic importance assigned to the settlement in Colonial times, since the site of the city was a village many years previous to the plotting of the city by the State.

In 1749 the expedition of Céleron descended the Allegheny and on the third of August of that year passed a village on the "Riviere aux Boeufs" (French Creek), en route for some locality in which to bury the leaden plates which proclaimed the renewal of the possession the French had taken of the Ohio River and of all those that empty into it and of all lands on both sides of those rivers.

Céleron was accompanied on this expedition by Father Bonecamp, Jesuit mathematician, who made a map of the route of the expedition. According to written accounts of the Céleron expedition, the ancient village contained ten cabins. The French, at that time, assigned to it no definite name, and simply designated it as a village of Loups. This word is the French term for Wolf, and the Wolf tribe of Delawares was called by the English Munceys. Later it was designated as Weningo, a corruption from the ancient word used by the Senecas to designate French Creek; this word was afterwards rendered Wenango, then Vinango, and later Venango, which became the permanent orthography. Washington, in his journal, under date of December 4, 1753, gives the name of Venango to the ancient village.

The first white man to penetrate into these wilds was Father Louis Hennepin, a Franciscan friar, who was working quietly in Canada at the time of the arrival there of the great Jesuit explorer, La Salle, in 1678, on his third visit to that country. His solitary presence in this valley was about the year 1677, 265 years ago.

The first actual settlement in the county was at Franklin. In the same place where John Frazier, the Scotchman, had set himself down

to tinker with old guns for the Indians, and to sell them new ones, in exchange for furs and skins, in 1745 to 1747, George Power came in 1790, to engage in much the same enterprise, except for the gunsmithing. He had previously been there with the soldiers to assist in building Fort Franklin, in 1787, having had some official connection with the army, which perhaps terminated with the completion of the fort. However, upon his return, he came with the intention of making the place his home, brought a small stock of goods in order to carry on a trade with the Indians, and opened a store. He became a famous Indian trader, and spoke the language of the Senecas with ease. He was a shrewd trader and was on particularly good terms with the chief, Cornplanter. His mortal remains now rest in the old cemetery in Franklin.

The Venango County Courthouse stands in the center of the beautiful park previously mentioned and, with its excellent symmetry of architecture, and beautiful surroundings, is recognized as one of the very imposing public buildings of the county, while its two court rooms and the various offices are well equipped with all modern facilities for the efficient discharge of the business of the county. A much needed addition to the building a few years ago was skillfully designed and constructed without detracting from the artistic lines of the original building, much to the satisfaction of the older residents of the city.

The importance of this city in the petroleum industry, both in the producing and the refining branches, has already been related. Many of the citizens are still actively engaged in the production of petroleum, and mention has been made of the present refining interests with plants located in the city, the Socony-Vacuum Oil Company, Inc., Railroad Division, and the Franklin Creek Refining Corporation.

The research and engineering laboratories of the Valvoline Oil Company and the Galena Oil Corporation make both physical and chemical tests of petroleum products and do development work.

The Marvin Manufacturing Company manufacture greases and railroad oils.

The Franklin Steel Works produce rolled steel products, rail steel and axle steel grades of merchant bars, reinforcement bars, and special shapes. They employ approximately three hundred persons.

The Franklin plant of the Chicago Railway Equipment Company produces railroad brake beams.

The Franklin plant of the Chicago Pneumatic Tool Company is the largest of this firm's plants. Buildings now devoted to production cover fifteen acres, while additions now under construction will add

nine more acres to this large plant. The approximate number of employees is one thousand five hundred. The products manufactured are air and gas compressors, vacuum pumps, Diesel engines, after coolers, inter coolers, and oil field drilling bits.

The Joy Manufacturing Company manufacture coal mining machinery, consisting of mobile loading machines, conveyors, shuttle cars and drills, their products being highly regarded by the coal mining industry. They also manufacture snow loading machines. This company has been very successful and has enjoyed a rapidly increasing production; with thirty-seven acres of land available, they are in a good position for further expansion. They now employ approximately 650 persons.

On October 7, 1940, The Arms-Franklin Corporation acquired the plant of the Franklin Engine & Manufacturing Company, successors of the Franklin Valveless Engine Company, for many years manufacturers of gas and oil engines, largely for oil field use. The president of this firm is Myron I. Arms, formerly president of the Etna Standard Machine Company, Youngstown, Ohio, manufacturers of steel mill machinery. Although now one hundred per cent. on war production, this firm in normal times will manufacture steel mill machinery, in which industry Mr. Arms has been engaged during his lifetime. The firm, at the present time, employs approximately three hundred persons.

The Franklin Bronze & Aluminum Company produce all grades of bronze and aluminum castings, and are now entirely on war production.

The Charles N. Hough Manufacturing Company are manufacturers of oil well pumping equipment, their products being highly regarded and in use in every oil field in this country, while they also enjoy considerable export business.

The Pennsylvania-Conley Tank Line, a division of General American Transportation Corporation, repair tank cars for the various interests using this medium for transportation of their products. They employ approximately sixty persons.

G. A. Freyermuth & Son and Franklin Feed & Supply Company each operate feed mills.

The lumber industry is represented by the Howard & Nicklin Lumber Company, The James Lumber Company, Austin Lumber Company, and the Galloway Woodworking Manufacturing Company.

The Mutual Foundry Company are manufacturers of grey iron and alloy castings.

The Franklin Plastics Division, Robinson Industries, Inc., manufacture various plastic products.

The Miles P. Brown Boiler Works build tanks and all types of steel plate construction; now on war production.

An important Franklin industry is The General Manifold & Printing Company. This company, originally The General Manifold Company, a Pennsylvania corporation, was one of the many industrial concerns founded by the late General Charles Miller, of Franklin.

The company was organized in 1900, with a capital of \$4,500,000, to acquire the Weeks patents for a process of making hard, dry, polished carbon paper; an experimental plant having been operated for more than two years prior to this in Chicago, where experiments were carried forward that developed the process.

One of the largest plants of a similar character in the world, with special machinery and men capable of operating such equipment, to make use of a clean manifolding preparation in such a way as to constitute a new art, or a very great improvement on the old process of producing duplicate or multi-copied documents, was built at a cost of \$300,000.

Carbon manifolding or duplicating papers are made by a process that produces a dry, clean, waterproof, non-crocking carbon sheet. It applies this carbon to the back of printed forms—especially blank forms—where one or more copies are wanted. It makes interleaving carbon sheets for letter writing that are clean, give more copies, require no tissues, tin foil or moisture-proof box, at a price much lower than that of former types of interleaving carbon.

Forms of all kinds are printed in large quantities. They print, bind, pad, rule, perforate and number forms and do a general railroad and commercial printing business, making a specialty of that class of work where manifolding or copying is done. It was early recognized that no railroad or other customer could afford to adopt a blank or a system of blanks that they were liable to have difficulty of getting promptly from the printer, and provisions were made for the prompt execution of all orders.

The practice of applying a copying film to the back of blanks—for instance, a telegraph blank—saves all the time of copying by wringer, interleaving paper or press, makes a clear *facsimile* copy at one writing—saving labor, apparatus, chance of mistakes and the greatest of all savings—time.

As applied to train orders each copy has a carbonized back and the orders are made up in book form. The operator counts as many

leaves of his book as he requires copies, slips in his stop card, and writes his order with a lead pencil, making three, five, seven or nine copies at once without the use of interleaving sheets, the use of tissues or of stylus. These orders are on white paper and are more legible than are tissues, and are safer. This system is applied to thousands of blanks for all kinds of work, and is in use by the United States Government, telephone companies, manufacturers, merchants and railroads.

Paper is purchased in very large quantities and for any customer using a standard an order for a supply may be placed and promptly executed. Special machines are provided for each part of the work as fast as the demand promises to warrant it.

A great number of special presses and machines designed to meet the requirements of various customers have been provided. All of the carbon machinery was specially designed and built for this plant.

The building is 407 feet long, 150 feet wide, having in its single story roof ten saw-tooth skylights, each 150 feet long, besides a great number of windows; it is one of the best lighted manufacturing plants in the country. In the apex of each saw-tooth there is a ventilator 150 feet long. Under the building from end to end there is an immense tunnel with numerous branches through which hot air is forced in winter and cold air in summer.

Power is distributed from a switchboard in the engine room throughout the building in fireproof conduits and carried direct to motors attached to each machine, thus doing away with shafting and belting. Overhead tracks carry the thousand-pound rolls of paper to the carbon machines and from them to the rotary cutters or the presses.

All the materials used go into one end of the building, are completed, and go out at the other end. The New York Central Railroad has a siding the entire length of the building, touching both its loading and unloading platforms.

Handsome coat and wash rooms with hot and cold water and clothes closets are provided and there is a hospital room with first aid facilities. Especial attention has been paid to making the place comfortable and pleasant for workers, with every sanitary precaution known to engineering.

The business of this firm is Nation-wide, special forms being designed and furnished to the principal transportation, communication, light and power utilities, government bureaus and departments, large mercantile establishments and industrial concerns of the Nation, together with general commercial printing.

One of the interesting war contracts of later days which came to Franklin was awarded The General Manifold & Printing Company, which, with three other printers, received an order for 50 per cent. of the war ration books No. 2. The other half of the amount was distributed among fourteen smaller plants. An idea of the magnitude of this three-color job, requiring perforations for all stamps, is gained from the fact that Manifold's part of the work called for fifteen freight carloads of paper.

Over a half century ago, in the city of Cincinnati, Ohio, Lebbius Harding Rogers made the first carbon paper. It has revolutionized office routine and contributed tremendously to the expansion of business.

Few people know of the crude methods used in the manufacture of carbon paper and typewriter ribbons in their beginnings. The idea behind carbon paper was originated by a young man working in a wholesale grocery house in Cincinnati. He was making four copies of a bill of lading, which had to be made up one at a time, when he thought of smearing crayon over pieces of paper and placing the crayon-smeared sheets between his bills of lading. The result was four copies at one writing, which seemed like magic in those days. This young man was Lebbius Harding Rogers, later to become the head of the Rogers Ribbon & Carbon Company.

With his new idea before him, Rogers gave up his job. He immediately went to his brother Hiram, who was manufacturing oiled paper for manifold. Together they concocted a formula of tallow, lard oil, and lampblack, with benzine as a carrying medium, with which they coated both sides of paper sheets. The formula was applied in a cold state. This type of paper is known today as a full coated pencil carbon.

The wax mixture was heated and applied by hand on a steam table covered with a glass top. Various types of brushes were used to apply the ink to the paper, the most frequently used being a lamb's wool brush.

As each sheet was coated, it was interleaved with old newspapers because of its smudginess. In writing to make carbon copies a stylus pen was used rather than a pencil or ordinary pen. By insertion of one sheet of full coated carbon paper between two sheets of manifold paper, and using a stylus, twenty copies could be made at one writing.

Rogers' first sizable order was sold to the government for making copies of weather reports, which had up to then been made out singly, as were the bills of lading. With this slight success, he went

to New York in 1869 and started the American Manifold & Writing Company, and developed what was known as the "letter writer," a manifold book made up of a letter sheet and a duplicate copy. Bradstreet and R. G. Dun Company were large consumers of the first carbon paper used in making out credit reports.

Rogers was the first to think of train order carbon paper. Its use was brought about by a wreck on the Erie Railroad. Jay Gould and Jim Fisk were the owners of the railroad at that time. Upon hearing of the wreck, Rogers called at the office of the Erie Railroad, explaining that he could eliminate accidents of that kind and showing how copies of the train orders could be made out, one for the dispatcher, one for the engineer, and one for the main office. Fisk saw the possibilities and placed the first order for train order carbon paper.

Rogers also invented the first one time carbon paper, or what is known as printer's carbon paper. He patented this. When asked what he wanted for his patent, his reply was, "\$5,000 today, \$10,000 tomorrow." It was purchased that day. The purchaser was the forerunner of the present General Manifold & Printing Company.

Up to this time all carbon papers were being manufactured by hand, as in the beginning, which was a slow process, the average man making not more than four hundred to five hundred sheets per day, in the approximate size of ten by fifteen inches, as compared to approximately a quarter million sheets per day turned out on the later coating machines.

Another step in the evolution of carbon paper as we know it today involved the use of wax to render the impression clear and sharp. The idea of using wax came first to Rogers, who got his inspiration for it from its use in the making of wax crayons. The early wax carbons tended to dry out after several months in stock. Carbon paper made today, however, can be carried in stock, if made under proper supervision, for several years.

Although the original dry process for the manufacture of carbonized papers is still in use, the great majority of carbonized papers now being manufactured are produced in specially constructed carbon coating machines using a liquid ink which is composed of pigment colors, waxes, oils and other ingredients.

With all the improvements of machinery, refining of oils and waxes, and the production of color, carbon paper has advanced to its present stage, and one must credit the associated industries such as paper, color, wax, and oils, for a great deal in the evolution of this product.

In all of the advances and improvements in the industry, The General Manifold & Printing Company has been in the forefront. This firm gives employment to approximately three hundred persons, among whom a very remarkable spirit of good fellowship prevails.

Other Franklin firms engaged in the commercial printing industry are The News-Herald Printing Company, Ben Franklin Press, Cox & Sampson and the Franklin Press.

The baking industry is represented by the Hygienic Baking Company and L. L. Limber.

Commercial Greenhouses are operated by the Hillcrest Greenhouse and Norman E. Anderson.

The roofing and sheet metal industry is represented by contracting firms in that line, George Clay, Jr., and J. B. Gyder, and pattern making by the Franklin Pattern Works.

H. T. Osburn Company, Hetz Construction Company, Inc., and E. E. Yarletts are general contractors.

Big Rock Water & Beverage Company market the well-known Whannis table water, and make a full line of soft carbonated beverages which have a wide sale.

Apple culture and commercial growing of apples is another industry engaged in by a number of growers, and one in which interest and activity is increasing. It is an acknowledged fact that the region produces the finest quality apples grown anywhere in the world, and there is always a ready market for Venango County apples.

The engineering offices of the Pennsylvania Department of Highways, District No. 1, embracing six counties—Venango, Crawford, Erie, Forest, Mercer, and Warren—are located in Franklin, and three miles from the city is located the district maintenance garage and superintendent's offices. Employment varies according to the season of the year and the extent of highway construction and, in the engineering offices, will vary from 125 to 200 employees; in the maintenance garage and superintendent's offices, from 100 to 300 employees.

The product of one Franklin industry is unique. Fulcrum oil, produced by the Fulcrum Oil Company, has a sales value of \$38,400 per barrel; another oil produced by this firm has a sales value of \$6,000 per barrel. These oils were first introduced as watch and clock oils.

By reason of these oils being manufactured in a city which from the time of the birth of the petroleum industry has always been prominently identified with that industry, the impression might prevail that

the products are or contain petroleum and mineral oil. However, Fulcrum oil is not a mineral oil nor does it contain a particle of petroleum or mineral oil in its composition. Mineral oils are not suitable for timepieces and no watch or clock oil should contain a particle of petroleum or mineral oil. Petroleum and mineral oils will not "stay put"—they have a tendency to creep away—and they will evaporate. If mineral oils are mixed with animal, fish or vegetable oils, this creeping away and evaporation will leave inadequate lubrication. Therefore, any use of petroleum or mineral oils will be detrimental to a proper watch and clock lubricant.

During World War I there occurred a serious difficulty in the lubrication of tachometers, the speed indicators of airplanes. In these mechanisms were parts to be lubricated where the play was about the same as the ordinary small bracelet watch, and this lubrication had to be effective at forty degrees below zero.

The War Department experimented with all then known lubricants. Every oil that was tried failed. An urgent call was made on the manufacturers of all superfine lubricants to try to solve the problem. Experts from various companies were put to work and many formulas and samples were submitted. Only one oil was offered which met every requirement, an oil produced by the Fulcrum Oil Company. Thereafter the War Department specified that all small mechanisms furnished them must be lubricated with Fulcrum oil.

There are few oils aside from mineral oils which will not thicken at a low temperature. Most lubricants for watches and clocks become gummy and stringy when they thicken at about zero. This retards the mechanism and consequently is detrimental as a lubricant.

Fulcrum oil clouds slightly at this low temperature and forms what might be called a light lubricating grease. This does not retard the mechanism, but lubricates almost as efficiently as it does in its fluid state. This is one of the superior qualities claimed for Fulcrum oil. At a low temperature the watchmaker may notice that Fulcrum oil looks cloudy in the bottle, but this clouding disappears just as soon as the temperature rises, and in regaining its fluidity the oil does not separate in any way.

It is for this reason that Fulcrum oil is used on almost all street clocks, electric time switches on railroads, outside water meters and on almost every kind of mechanism which requires lubrication at a low temperature. Approximately ninety per cent. of the production of this company is now reserved for the uses of the armed forces of the Nation, the army, navy, signal corps and air force.

Rose Ice Cream Company manufacture ice cream, and Judson's Dairy also manufacture ice cream, as well as other dairy products.

Adjacent to the city are a number of dairy farms and among the various herds there are Jersey and Guernsey cows with outstanding records for the quantity and quality of milk produced.

The Venango County Dairy Herd Improvement Association, in coöperation with the Agricultural Extension Service of Pennsylvania State College, finished its eighteenth year on July 31, 1942, with twenty-two whole year herds. There were 608 cows in the association during all of the year. In addition, one herd, with five cows, was in the association part of the year and was not included in the report for the year.

The report of the association shows butter fat average per cow, 425.8 pounds, the highest of any association in the State, and in comparison with the year 1925, 309.2 pounds average, indicates the improvement that is being made in this important industry. There are approximately one thousand cattle in the county.

Sheep growing has also been increasing in the county with a corresponding increase in the quantity and value of the wool produced.

The Agricultural Extension Association, with offices in Franklin, renders most valuable service to the agricultural interests of the county. The Venango County Farmers and Fruit Growers Association is also active and has been helpful in advancing agriculture.

This progressive city has for many years successfully operated a municipal water works and a few years ago completed a modern sewage disposal plant at a cost of over \$200,000.

Oil City, long prominently identified with the petroleum industry, still occupies a very important position in that great industry. In the chapter on Petroleum, mention has already been made of the refineries located there, the Pennzoil Company, Quaker State Oil Refining Company, Wolf's Head Oil Refining Company (refinery at nearby Reno), Continental Refining Company, and Crystal Oil Works.

One of the important industries of the city is the Oil Well Supply Company, a subsidiary of the United States Steel Corporation. This very large plant, employing approximately one thousand four hundred persons, manufactures gas and Diesel engines, pumping and drilling equipment for the oil fields throughout the entire world, and is now working on war production.

Oil City Glass Bottle Company, with 250 employees, manufacture glass bottles.

Knox Glass Associates, Inc., is the sales organization for the Knox Glass Bottle Company, of Knox, Clarion County; Oil City

Glass Bottle Company, of Oil City; Pennsylvania Bottle Company, of Sheffield, Warren County; Marienville Glass Company, of Marienville, Forest County; Wightman Bottle & Glass Manufacturing Company, of Parkers Landing, Armstrong County, all in northwestern Pennsylvania. Also included are Knox Glass Bottle Company, of Jackson, Mississippi; Knox Glass Bottle Company, of Palestine, Texas; Lincoln Glass Bottle Company, of Lincoln, Illinois; and Metro Glass Bottle Company, of Jersey City, New Jersey. With administration offices in Oil City, approximately seventy-five persons are employed.

Kramer Wagon Company, long famous for the building of high quality wagons, a line now coming into greatly increased production, due to restricted use of motor vehicles, also build truck bodies and employ approximately thirty persons.

Manion Steel Barrel Works, employing approximately 150 persons, manufacture steel barrels and drums and now, due to restricted use of steel for other than war production, are manufacturing fiber drums.

Continental Can Company, with approximately 125 employees, have been manufacturers of tin cans. Production has been halted due to war conditions, and plans are under way for resumption of operations in war production.

Champion Mullins Corporation, employing twenty-five persons, manufacture metal boats and cots, and are now building assault boats, or combination landing and pontoon boats, for the United States Army.

Allied Barrel Corporation, with approximately one hundred employees, manufacture tight wood barrels and kegs.

Manion Paint & Varnish Company manufacture paints, varnishes, etc.

W. J. Brundred Oil Corporation, producers of petroleum, employ one hundred persons.

National Transit Company, with approximately five hundred employees, transport crude petroleum, and some petroleum products, by pipe lines.

National Transit Pump & Machine Company is a wholly owned subsidiary of National Transit Company and prior to November, 1915, was a separate department of the Pipe Line Company known as Department of Machinery, Oil City Shops. In November, 1915, it was segregated from the assets of the National Transit Company and incorporated under the laws of Pennsylvania, using the style stated.

The National Transit Pump & Machine Company since the late seventies has been manufacturing pumps, engines and pipe line tools for the oil producers and oil refiners. Pumps include various types, from the smallest unit, that could be almost carried by a man, to those gigantic units that require six to eight cars to ship when torn down. Gas engines, both horizontal and vertical are produced, the horizontal type up to 1,300 H. P. and the vertical in sizes from 30 H. P. to 225 H. P.

The Curtis Rotary Pump Company was purchased entirely in 1931 and that line has been developed, and rotary pumps are manufactured in sizes from sixteen gallons per minute to three thousand gallons per minute. The company has also developed a line of marine pumps and engines, the latter being units of 2,500 H. P. and weighing 330,000 pounds assembled.

Also produced are pipe line tools, including tongs of all sizes, augers for boring under railroad crossings, river clamps and hooks, and line scrapers, a "Transit" invention which are introduced into the pipe line at various points to clean the lines of foreign matter.

The superior merit of National Transit equipment has long been recognized in the petroleum industry and it will be found in use in every country in the world where petroleum is produced. The company is now over ninety per cent. engaged in war production.

Oil City is the terminal for three divisions of the Pennsylvania Railroad with engine house, car repair yards and offices employing approximately six hundred persons.

The Oil City Tank & Boiler Company is a Pennsylvania corporation owned principally by individuals residing within the city of Oil City. The present corporation was formed on October 10, 1940, taking over the personal and real property of the former Oil City Boiler Works, which was established in 1876, and carrying on their line of manufacture of Oil City steel boilers.

After incorporation the present company added the Electroweld Steel Tube Division for the manufacture of electric resistant welded steel mechanical and pressure tubing. This division has been in operation since October, 1941, and is now in the throes of doubling its capacity for the manufacture of the above-mentioned tubing which will amount to fifty thousand tons per year of tubes when completed. The range of sizes manufactured by this division will be from five-eighths inch outside diameter to four and one-quarter inch outside diameter in interims of one-quarter inch. This division is now engaged one hundred per cent. in the production of war materials.

The Steel Boiler Division manufactures a complete line of low pressure steel heating boilers ranging in sizes from two thousand two hundred square feet to forty thousand square feet. The personnel required for the operation of this industry upon completion of its present expansion program will be between two hundred and three hundred employees.

James B. Berry Sons Company, with approximately seventy-five employees, are marketers of petroleum products.

Keystone Public Service Company, with general offices and plant in Oil City, and branch offices in Franklin and Titusville, furnishing electric current to these three cities and rural communities, employs approximately two hundred persons.

The Pennsylvania Telephone Corporation has recently completed a large three-story building in Oil City, which will serve as the Oil City district offices of the corporation, this district embracing all of Venango and parts of Crawford, Mercer, Forest, and Warren counties. This building, 66 by 176 feet, is a very imposing, modern one, located in the business center of the city. The Oil City district of the corporation employs over one hundred persons.

Oakwood Rose Gardens and W. M. Deyoe & Company are commercial growers of flowers. This industry is also represented at Reno by the Manross Greenhouses.

Rieck McJunkin Dairy Company, Cunningham Dairy, Mong Dairy, and Purity Milk Company all produce dairy products and give employment to a considerable number of people.

L. O. Bouquin Company and Maxwell Strickland are general contractors.

Borland Lumber Company, Earp & Kelley Lumber Company and the Gus F. Roess Sons Company represent the lumber industry in the city.

Ellis Hall Sons Company are manufacturers of nitroglycerine for use in shooting oil wells.

The main offices of the United Natural Gas Company, producers and marketers of natural gas throughout northwestern Pennsylvania, and employing six hundred persons, are located in Oil City.

The baking industry is represented in the city by the Hays Baking Company, Oil City Baking Company, and Jetter Bakery.

The Derrick Publishing Company, publishers of the Oil City Derrick, also do commercial printing in all of their branches, and employ, in their large plant, approximately 150 persons.

J. P. Langdon is also engaged in the commercial printing industry.

Vengold Dairy Products, Inc., manufacture ice cream and other dairy products, with their main plant and offices in Oil City and a receiving plant at Sandy Lake, and a number of stores in Oil City, Franklin and Sandy Lake.

Raymond Cleaners & Dyers, Superior Dry Cleaning Company, and H. & M. Kessler Dry Cleaners operate dry cleaning and dyeing plants, employing a considerable number of persons.

Oil City Sand & Gravel Company operate a large plant on the Allegheny River in Oil City, removing sand and gravel from the river.

The Oil City Milling Company and the Farm Service Company operate feed mills.

Numerous other industries, including machine shops, sheet metal works, roofing, candy and cigar manufacturing, wood working, and carbonated beverages add to the value of the production and the employment of the city.

The city has an airport, known as the Splane Municipal Airport, established at a cost of \$200,000, a municipal swimming pool, which also cost \$200,000, and a municipal parking lot that can take care of 250 cars.

Located at Reno, between Oil City and Franklin, on the hills overlooking the Allegheny River, is the Wanango Country Club, the membership of which includes citizens of each of the two cities, totalling about three hundred. It has one of the finest eighteen-hole golf courses in the United States and is noted for its beautiful surroundings.

The Oil City Boat Club, with a membership of nearly two hundred, is situated at Rockmere, just above the city on the banks of the Allegheny.

The city has three theatres; the Drake, seating two thousand, and the Latonia, seating one thousand six hundred, rank among the finest theatres in the East. The Drake has full stage setting for road shows.

Public Utilities—The twelve counties comprising the region embraced within the scope of this work, and designated as northwestern Pennsylvania, are well served by public utilities—electric, natural gas, telephone and railroad.

Practically all of the electric utilities are privately owned companies. The major exception is the Rural Electrification Administration, a coöperative Federal agency which owns and maintains several

thousand miles of rural lines serving farms and sparsely settled rural communities. Power for these lines is purchased from various utilities in the region. The R. E. A. in this section generate no power themselves.

The various private companies and the R. E. A. cover the entire region to such an extent that there are few places where electric service is not available. Rates for industrial power are very low with the result that industry is well electrified and these low rates have been an important factor in attracting new industries to the northwest region.

Power is generated principally by steam in coal burning plants. A small amount of power is generated by gas engines. Also, there is a good sized hydroelectric plant located on the Clarion River above Foxburg, Clarion County.

Major electric utilities serving the area are the Pennsylvania Electric Company, Erie County Electric Company, Pennsylvania Power Company, Keystone Public Service Company, Bradford Electric Company, and West Penn Power Company.

Pennsylvania Electric Company, a subsidiary of the Associated Gas & Electric Corporation, is the largest company serving all or part of nine of the twelve counties within the region. This company serves practically all of Crawford, Warren, Forest, Clearfield and Jefferson counties.

The city of Erie is one of the few cities in the country being served by two competitive companies, Pennsylvania Electric and Erie County Electric Company. However, practically all of Erie County outside of the city of Erie is served by Pennsylvania Electric Company. Both companies maintain large steam generating stations at Erie located on the shore of Lake Erie. Sections of Venango and Clarion counties, and a small part of McKean County are also served by Pennsylvania Electric Company.

Mercer County is served almost exclusively by the Pennsylvania Power Company, a subsidiary of the Commonwealth & Southern Corporation.

Keystone Public Service Company, a subsidiary of the Associated Gas & Electric Corporation, serves the major portion of Venango County, including the cities of Franklin and Oil City, also the city of Titusville in southeastern Crawford County. Keystone operates a large steam generating station at Oil City, where the general offices of the company are also located.

Bradford Electric Company, another Associated Gas & Electric Corporation subsidiary, serves the city of Bradford and the major portion of McKean County and a small part of Potter County.

Almost all of Elk and Cameron counties and part of Clarion County are served by the West Penn Power Company, a subsidiary of American Waterworks & Electric Corporation.

All of the companies are inter-connected with tie-in transmission lines among themselves and also with other companies outside of the region. This assures continuity of service when trouble is experienced due to storms or equipment failure.

United Natural Gas Company, a subsidiary of National Fuel Gas Company, serves the counties of Venango, Crawford, Mercer, Clarion, Jefferson and McKean. The Pennsylvania Gas Company, a subsidiary of National Fuel Gas Company, serves the counties of Erie and Warren, with United Natural Gas Company, however, serving Tidioute, in Warren County.

The counties of Cameron and Elk are served by the St. Marys Natural Gas Company, also a subsidiary of National Fuel Gas Company. Forest County is served by the Tionesta Gas Company.

Natural gas has been a great asset to this region and, over a long period of years, it was almost the universal fuel for both industrial and domestic use, providing a most convenient and economical fuel. Although, in more recent years, coal, which is found throughout the region, has come into much greater use than formerly, natural gas is still very generally in use.

CHAPTER XV

The Recreational Picture

There are two phases of the recreational aspect of northwestern Pennsylvania. One has to do with the recreational facilities provided by its cities and boroughs mainly for their own citizens, which are ample and excellent. The other is that of the opportunities this part of the State presents to the visitor for recreation, in the broadest meaning this term has for differently constituted individualities, which may range from the intellectual to the purely physical. It is for the "outlander" that this chapter is addressed rather than to residents who know their own sections well. Whether one seeks a revitalization of brain or brawn, let it be said without boasting or extravagant exploitation, northwestern Pennsylvania possesses something for everyone. This region of the great Commonwealth appeals to the stranger and the native alike, and takes a hold upon his affections that time and distance seldom break.

This appeal may be "its woods and templed hills," for it is rich in these. There may be none of the wonders of the world, neither dominating mountains nor great lakes, if one excepts Lake Erie. There are few vast vistas of excessive gorgeousness of scenery and violent disruptions of the surface, but in those qualities of Nature that impress with their rugged simplicity, that give keen and lasting pleasure, one must search long and hard for an equal. There are many quiet little streams, most of them in no hurry to reach the sea, which usually is by the Allegheny, Ohio and Mississippi rivers to the tropical Gulf of Mexico. The mountains, that appear to the dweller of the Rockies as only hills, are rounded and not high, but often covered to their tops with verdure and the woods, scattered helter-skelter over a landscape where the rough heights are interspersed with the greenest of valleys. The land of the elevated counties does not invite extensive agriculture, but the grassy acres to be found in most places are pleasant to behold and support a farming that has gone on from generation to generation since the establishment of

the United States as a Nation. Lakes are found in the most unexpected places and, for the larger part, do not bear the common English names which so frequently our Pilgrim forefathers gave to their eastern "ponds," but are called by titles that recall the Indians who hunted this territory before and after the white man came to America.

The man who has lived upon the western prairies boasts of their immense fertility and measures farms by the square mile. The winter resident of Florida romances about the glamour of a Florida day, and the Californian never ceases from singing his song of the endless sunshine on the Pacific Coast. But all stop to ponder upon the forest growth which ranges from the old, old pines of Cook Forest, to the new plantings of trees that flourish. But almost every stranger admires the clear-skinned, hardy, active, virile men and women that he meets everywhere. Sooner or later it penetrates his consciousness that these folk are products of the much maligned temperate climate, and of varied ancestral origins. Let it be frankly acknowledged that northwestern Pennsylvania has about all the climates the world contains, except the arctic and the tropics. Variety is the spice of life, and if during each year the region fails to sample some of these, it has been an oversight of the weather bureau. There are places where one can find as fine skiing as Switzerland or Norway can provide; there are other places where the high temperatures of the Sahara Desert spend a day or two, or so it seems. Nevertheless, when all the annual statistics are in they show for northwestern Pennsylvania an average temperature of about sixty-five degrees and an average low of thirty-five degrees, and who can ask for something better suited to human vigor and character?

One who has enjoyed the hospitality of the country during all seasons of the year and has interested himself in the "influence of soils, environment and climate; of fruitful woods and living streams, of tissue and sinew, brains and blood, that in a few generations transformed a wilderness into a potent region," is convinced that here abides an unusual people, particularly "noteworthy in enterprise, breadth of outlook, exceptional in tolerance." Possibly it is carrying ethnological theories too far to suggest that in such a limited area as a corner of Pennsylvania, a distinct type of people has been developed during a century and no doubt many of the people themselves would resent any such implication.

On the other hand it is strictly true that there are few if any sections of the Middle Atlantic States that were settled by folk from so

many different colonies along the Atlantic Coast and from overseas. This was due to a number of circumstances, one of which was the fact that the American Revolution, the prevalence of Indian troubles and the discouraging circumstances of the War of 1812, delayed the settlement of this country, and when at last it was safely opened to the enterprising pioneer, he came from all directions and countries: The Pilgrim and the Puritan from New England, the Cavalier from Virginia, the Knickerbocker from New York, and the Swede from New Jersey. There were many Germans from southeastern Pennsylvania, the Scotch-Irish from the slopes of the Appalachians; the English and the Scotch and the Welsh more or less from their native homes and the New World, the Huguenot from South Carolina, the Quaker from Philadelphia, Virginia, and farther south. There were the Moravians and the Lutherans from eastern Pennsylvania, the Catholics from Maryland, the Baptists and Presbyterians from New Jersey, and the Methodists from almost every one of the original thirteen states. Young men and women of vigor and enterprise, of varied ancestry and faith, came hither to subdue what historians are prone to call "a wilderness," to establish industries, commerce and a way of life, liberty and the pursuit of happiness. English stability, Scotch thrift, German steadfastness, Scandinavian patience and American virility and reckless abandon, all played rôles in the development of northwestern Pennsylvania. Too many of pioneer blood and inheritance have gone to other states of the Union, but enough have remained to form a kind of folk that is worth the while meeting and knowing well. The residents of other parts find a most cordial welcome to come and see for themselves, and the annual influx of visitors and friends increases constantly. The seeker after recreation finds here as he does elsewhere that the people of any place are the best feature of that place.

There is a class of tourist who must have more than a modicum of history with his recreative visits. Although only in comparatively recent years has the historic received publicity in northwestern Pennsylvania, except perhaps by Erie, there is plenty of history that has been made in this corner of the Commonwealth. There even have been prehistoric events that engage the attention of scientists and are interesting to the layman. Thousands of years ago the glaciers came down from the north and fought through the ages to break down and grind away the rocky ramparts of the Allegheny Mountains along the border between what is now New York and Pennsylvania. The miles-thick ice-cap won the battle in this part of the world,

except in one small section of northern McKean County. The breastwork of the hills in what is now called Allegany State Park, New York, proved unconquerable and "the Arctic cohorts were cloven as if by a plowshare, leaving their trailing terminal moraine to tell the tale as they flowed southward on either hand. Failing in a titanic attempt to penetrate the hills that surround Bradford, the defeated column was content to cleave a picturesque canon for its escape through the mountain wall below Kinzua." (Rufus Barrett Stone.) One does not have to be a geologist to understand the scarred battleground of nature as one can find it all over northwestern Pennsylvania, and need possess only the slightest scientific outlook to wonder at the effects of those mighty conflicts, to enjoy their beauty, and to wonder at the good or damage done to the natural resources of the hill country.

History to many people means records of "things done in the past of humankind," and as will be shown later, there is plenty of the historic in the oft-told stories of French and English explorers, of the Allegheny River and its branches, once an "Imperial highway for France, Spain and Great Britain," and from the time our Republic was organized, which served as one of the important waterways traversed by the eager pioneers on their way to settle, not only this "wilderness," but a future Ohio and the Northwest Territory. There were bloody battles fought along its banks and near the shores of Lake Erie. Treaties and negotiations (Indian and white) were made that affected the course of American affairs, and there was a time when folk, angered at the indifference of the East to means and methods of reaching this land, were all prepared to break away from the Union and establish the independent "State of Allegheny." How better transportation prevented a secession of territory from the United States, how the turnpike, the "iron horse," and modern highways solved many problems are items of history that add color and interest to present-day touring. Where in our Nation can one find a more American story than that of the early development of one of the outstanding industries in the world, the production of petroleum and its many products? In the heart of northwestern Pennsylvania commercial oil drilling was started. The visitor to this region sees no well driven through the bottom of the ocean as on the Pacific Coast, nor forests of derricks as in the Southwest, but if he is observant he can see little wells on the hillsides, and great refineries in the towns and cities. The tale of rise and fall and the rise again of the petroleum industry in a few counties of a great Commonwealth has

been written again and again, nearly always with the touch of a novelist, which is as it should be. One misses a great deal in a visit to northwestern Pennsylvania if one fails to learn something of its industries, whether petroleum, coal mining, shale and glass production, the tanneries and the distillation of wood, or the history of the famous Grape Belt of Chautauqua and Erie counties. Come and see what one corner of Pennsylvania has to show, and while reveling in its natural attractions and recreating physical powers, add to the mental equipment by getting acquainted with the accomplishments of a population of heterogeneous origin, but closely knit in qualities and endeavors.

One of the outstanding contributions that northwestern Pennsylvania has made during the present century to the recreational facilities of the Middle Atlantic States is her national and State forests, forest parks, memorial parks, and "recreational areas." They range from the Allegheny National Forest about three-quarters of a million acres, through Presque Isle State Park, at Erie (3,200 acres), and several other State controlled sections, to smaller and "natural" and scenic areas which an enlightened public now preserves and improves for a variety of uses. If one calls them all "parks" it is not to identify them with those pretty spots to which we go on a hot summer day for amusement, but great areas of forest, lakes, streams, and pleasant homelike country with the large towns founded long ago. Some of these areas are not so accessible now, with gas rationing and limited automobiles, but the railroad, the motor bus, bicycle and "shanks' mare," bring many within rather easy reach. The largest of these parks boast camp sites, cabins, overnight shelters, tourist facilities that invite not only the Sunday visitor, but the folk who can stay a week, a month, or the season. Whoever likes to get close to nature, whoever likes to hunt, fish, camp, hike, or just be quiet, whatever his profession or occupation, will find in the parks and forests of northwestern Pennsylvania a hearty welcome and satisfying richness. "Learn to use our forests" is a national slogan, especially applicable to northwestern Pennsylvania.

As in colonial days the northwestern Pennsylvania region was known as the great hunting ground of the Indian, so today that same region is the hunter's paradise of the Nation.

Pennsylvania is the outstanding hunting State of the Nation, and the northwestern section of the State is the favorite rendezvous of the hunters during the legal hunting seasons. The entire region is dotted with hunting camps and lodges, and during the deer season

especially, thousands of hunters from other parts of the State, and from other states, annually join with local hunters in the quest for deer. At the beginning of the season each year, automobile traffic is extremely heavy and sometimes a main highway will be blocked with cars for a distance of a mile or more approaching the favorite hunting grounds.

The fact that Pennsylvania is the leading hunting State of the Nation is largely due to the well-directed work of the Pennsylvania Game Commission, which was created in 1895. The State was the first to provide game refuges, the first to establish training school for officers where officers are trained both in the enforcement of the game laws and in game management, and the first to declare the black bear a game animal and to provide for its protection in 1905.

The officers' training school is located near Brockway in Jefferson County, on a block of forty thousand acres of State game land. A part of this tract is a game refuge, while a considerable part of it is open to public hunting.

The commission began the establishment of refuges in 1905, and to stock them with deer. These areas were especially selected blocks of forest land containing from two thousand five hundred to three thousand acres each, surrounded by a single strand of wire, a fireline, and well posted. In the beginning all new refuges were stocked with about fifty animals, usually one buck to three does, and from 1906 to 1924 the commission bought nearly one thousand two hundred deer.

In 1907 the Buck Law was passed, largely for the purpose of making it safer to hunt deer, but incidentally to increase the breeding stock. That year it was estimated that two hundred legal bucks were taken in the entire Commonwealth.

More refuges were established as fast as funds permitted. At first they were located only on State forests of which there are one million six hundred thousand acres. Later the game commission began to lease or purchase lands for refuges and public hunting grounds, and today the sportsmen of Pennsylvania own almost seven hundred thousand acres of their own. At the present time a total of more than three hundred forest land refuges are being maintained by the commission, most of them in fine deer territory, and all surrounded by public hunting grounds.

The deer, permitted to have free range, quickly learned to seek the protection afforded by the refuges when pursued. There were no wolves left in Pennsylvania, bobcats were hunted down in the vicinity of all refuges, and the deer were given every possible opportunity to increase and spread to the adjacent open hunting grounds.

The sportsmen were so thoroughly pleased with the Buck Law that the Legislature successively increased the legal requirements. Originally the law merely stipulated that only male deer with visible antlers might be shot; then a deer with a two-inch antler; later the length was increased to four inches, and finally nothing less than a male deer with two or more points (a "Y") to one antler was legal.

From 1907 to 1915, because of the very favorable food conditions which then prevailed throughout the forests and the protection afforded the animals, the herd increased rapidly, and by the latter year almost one thousand three hundred bucks were bagged. That was the year when the game commission first began using the funds obtained from the sale of licenses, enabling it to expand its program rapidly. That was also the period when the State developed its extensive forest fire control program, and the thriving young forests soon began to shade out much of the succulent undergrowth upon which the deer love to browse.

The commission then began receiving complaints from farmers and orchardists in certain regions that the deer were devastating various crops, and making it impossible to start new orchards. Far-sighted officials realized that sooner or later the deer seasons would have to be reversed regularly, say every fourth year, and that instead of hunting only bucks with antlers, some of the does also would have to be removed. Such suggestions met with bitter opposition; the hunters had been educated to believe that does were like sacred cows, and that the only way to assure a future deer herd was to save the females at all hazards. A bill in the 1919 Legislature attempting to declare a doe season every fourth year never got out of committee. That fall the kill of bucks reached almost three thousand.

Landowners continued their complaints and the Legislature, in an effort to pacify them, set up machinery whereby the game commission might furnish wire and staples for deer-proof fences. Since the difficulties were then confined to a few areas only, that seemed like an easy way out. However, it served only to help a few and make matters worse for their neighbors. Some years the \$10,000 fund for this purpose was quickly exhausted, and many applicants had to be turned down. Today Pennsylvania has more than 275 miles of such deer-proof fence erected at a cost of more than \$127,000 from the State Game Fund.

By 1922, when the kill of legal bucks exceeded six thousand, leading sportsmen had finally become convinced that it would be desirable to kill does in certain areas, and the first legal season on

female deer was declared in two townships in an apple growing section during the fall of 1923. One hundred permits were issued at \$5.00 each, but only eight deer were actually killed. It developed that the majority of the permits had been purchased by those who sought to "save a doe." Various other permit plans were tried in limited areas with only partial success during the three succeeding seasons. In 1926 a total of 1,295 does were so removed, but the kill of bucks that same year jumped to almost twelve thousand.

The following year (1927) no open season was declared for does because of a general opposition to a State-wide thinning proposal, but something over fourteen thousand antlered bucks were killed. By that time the situation had become so critical that it was a question whether the Game Commission of Pennsylvania would survive because it had dared to assume its sworn responsibility to control the deer herd. However, the following year it courageously closed the season on bucks for the first time in the history of the Commonwealth, and allowed the killing of antlerless deer only. The total bag was slightly over twenty-five thousand. That was an innovation in wild life management, which attracted countrywide attention, and brought much abuse upon the heads of the members of the commission.

Further growth of the forests shaded out more and more of the deer browse, and the complex problem was rapidly approaching a crisis. Forest reproduction was at a standstill. Idle acres in the forests could not be replanted because the deer destroyed the seedlings as fast as planted; in many areas food and cover for small game, such as ruffed grouse, wild turkeys, varying hares and cottontail rabbits, had been denuded. A "deer line"—the height to which deer can normally reach succulent tree growth—was rapidly becoming evident throughout all of the real deer country.

A few more does were removed in 1930, but by 1931 the game commission decided that courageous action alone would save the day. It declared a combined open season for both antlered bucks and antlerless deer. Spike bucks and fawns below a specified weight were kept on the protected list, the former primarily to make hunters look carefully before shooting, so as to save human life. That year a total of ninety-five thousand deer were killed, almost twenty-five thousand of them being antlered bucks.

Immediately throughout the Commonwealth there arose such a storm of protest that the commission's stability was again in jeopardy. Hunters argued that year would be "the last of the Pennsylvania's

deer hunting." However, later events proved that they were wrong, and that the breeding stock was much larger than commonly believed possible. Estimates ran all the way from six hundred thousand to one million animals prior to the 1931 season.

One of the common complaints during every antlerless deer season was that all the "button bucks"—male fawns of that year—would be killed off, and that there would be no bucks for the hunters two years later. However, the figures speak for themselves. The year before the big 1931 clean-up the kill of bucks was 20,115. Two years later, when the male fawns of 1931 would be adorned with legal antlers, the kill was 20,480. This same thing happened the second year following every large kill of antlerless deer.

In 1937 the commission attempted to issue permits for the removal of specified numbers of deer from each of the counties in the Commonwealth, but through a technical legal error that season was knocked out in the courts. More than \$100,000 in permit fees was refunded. The following year, however, the commission again reversed the season, prohibited the killing of antlered bucks, and a total of one hundred seventy-one thousand antlerless deer by actual count were removed.

As was the case in 1931, deer hunters once more argued that there would never again be a large kill of deer in the Keystone State. The commission, however, was faced with the problem of bringing the herd under control, and keeping it within the diminishing forage supply available. Extensive improvement cutting operations were launched with CCC and WPA and other relief labor, but it was realized that until such time as lumbering operations again became more or less common in the Commonwealth deer browse would not be available in anything like the quantity or quality that prevailed prior to 1920. In 1939, a total of forty-nine thousand antlered bucks were bagged, and in four counties, where insufficient deer had been removed the previous year, more than fourteen thousand five hundred antlerless deer also were taken in two days at the close of the buck season.

During the spring of 1940 the commission determined that it would again be compelled to declare a combined season for deer as had been done nine years earlier, but in this instance it was decided to protect only spike bucks to save human life, and to put no restriction on fawns since the little fellows were always the first ones to starve during a severe winter. The weight limit on fawns was

unworkable, anyhow. Notwithstanding the heavy kill of 1938, the total 1940 bag, based on tabulated individual reports from ninety-eight and one-half per cent. of all the licensed hunters in the State for that year, indicated that 40,995 legal antlered bucks and 145,580 antlerless deer, or a total of 186,575 animals had been taken.

For the twenty-six years that records have been maintained the total of antlered bucks has been 371,627, that of antlerless deer 482,280, or a grand total of 853,907. For the ten-year period starting with 1931, the total was 257,471 antlered bucks and 448,746 antlerless deer, or a combined total of 706,217. The antlerless deer ran about one male to four females, so that during the past decade the kill has been about 347,000 males to 359,000 females, or almost equal.

Just what the success of the deer hunters will be during the coming season is problematical. With many of the hunters in the service, and many others engaged in war production industries, while the deer are widely scattered, the kill may not be as large as in recent years. However, there will be ample breeding animals left, and past experience indicates that within a few years Pennsylvania again will be compelled to allow the taking of females.

The whole deer problem has been simply one of trying to manage the herd so that the range would not become overstocked. In any State where does are rigidly protected, and illegal killing is actually reduced to a minimum, the females are bound to increase rapidly. In view of the fact that approximately as many females as males are born, it is obvious that any State which can so manage its deer herd as to allow the taking of approximately the same number of each sex after the range once becomes adequately stocked, will be best off in the long run.

Another interesting fact in connection with Pennsylvania's deer problem is the change in the average weight of the animals. During the earlier years the average weight of the bucks ran from 125 to 150 pounds, hog dressed. Many of them weighed up to 175 pounds and more, and the antlers were then real trophies. In recent years, however, bucks averaged only 115 pounds, the weight of the antlerless deer about eighty pounds. To produce big, handsome animals with racks of antlers that many sportsmen would highly prize requires two things: first, ample food of proper quality; and, second, allowing the animals to mature before they are killed. So-called inbreeding in the wild does not appear to be important. The big problem is food.

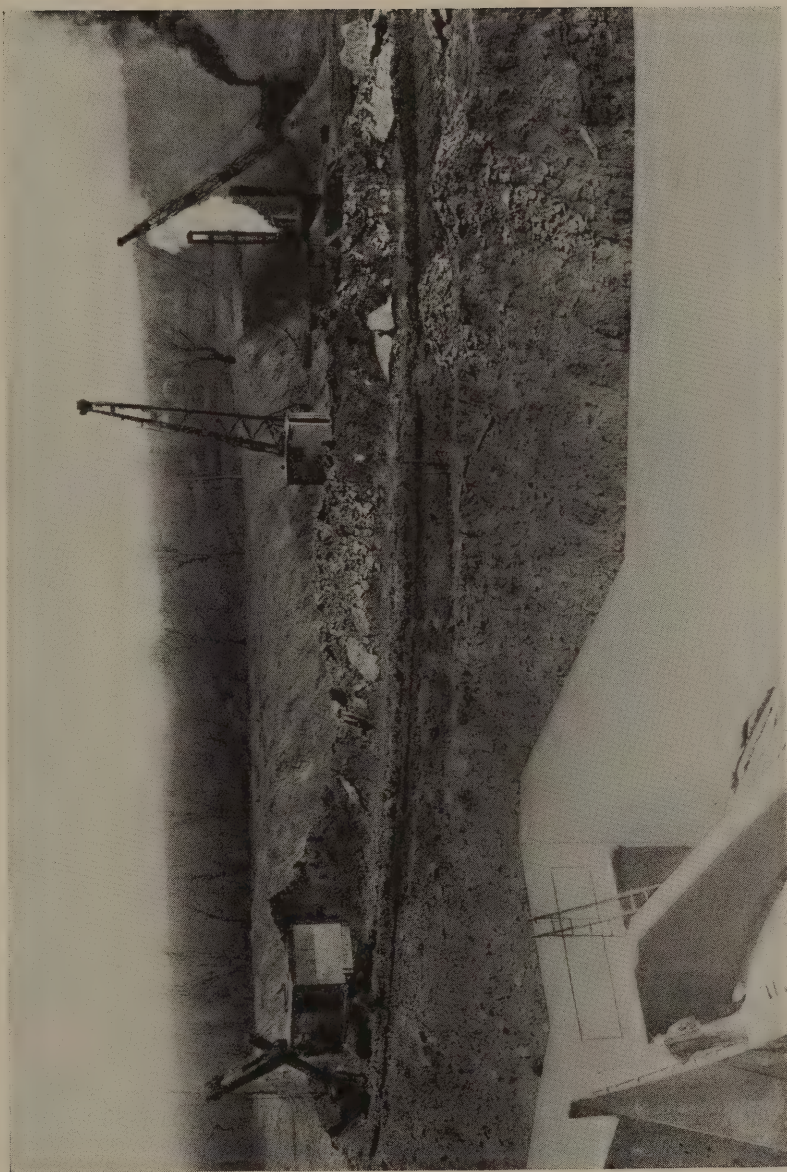
The question may be asked, "How many deer hunters does Pennsylvania have?" There is no definite way to separate the small game hunters from the big game hunters, since only one license costing \$2.00 for residents and \$15 for non-residents is required, regardless of the kind of game being hunted. The data collected indicate that as the deer herd increased the number of hunters enjoying this sport likewise increased rapidly. In 1940 it is estimated that out of a total of six hundred seventy-eight thousand licensees three hundred thousand of them hunted deer.

A number of other states are now grappling with some of the same problems that faced the Pennsylvania Game Commission during the past fifteen or twenty years. Sooner or later they will have to solve their problems in their own way, or they will lose thousands of animals by starvation and disease. Unfortunately the human element—the public relations problem—is always more difficult to handle than is the management of the wild creatures so as to maintain the proper balance between their numbers and their forage supply, says Seth Gordon, executive director of the Pennsylvania Game Commission, and a recognized authority on wild life, and to whom the author is indebted for much of the information contained in this chapter.

When any herd of big game animals increases beyond its forage supply, either the sportsmen must be allowed to crop the surplus or nature will do it for them in her own cruel way, says Mr. Gordon. Deer never starve early in the winter, because under normal conditions their accumulated fat carries them through a considerable portion of the winter with only a limited amount of food. But when the lean months of the late winter and early spring arrive the grim reaper carries them off rapidly wherever succulent browse is not available. Unfortunately, where deep snows blanket the deer territory, the animals must "yard up" in restricted areas, and they then can utilize very little of the general range. In these yarding centers starvation losses are appalling during severe winters, such as 1935-36, notwithstanding attempts to supply hay, grain and other foods. Under such circumstances it has been found that the most effective temporary remedy is to cut succulent browse for them.

THE PYMATUNING STATE GAME REFUGE

With the establishment of the Pymatuning State Game Refuge in 1935, a long standing ambition of the Pennsylvania Game Commission and sportsmen of the State was fulfilled. At last a beneficial



Early Operations on the Pymatuning Reservoir Dam, Jamestown

wild waterfowl refuge took its place within Pennsylvania's well-established and successful system of upland game refuges. A large "duckport" was created, where immense numbers of colorful waterfowl could stop for food and rest during migratory flights, and where those that desired to do so could take up their summer abode.

Although Pennsylvania ranked for many years as a leader in upland game restoration and management, it had been able to do very little in the Nation-wide program to conserve and restore the dwindling supply of ducks, geese, swans and other migratory waterfowl that constitute a very valuable international resource. They had suffered severe losses in recent years due to unwise draining of huge marsh areas, their natural breeding grounds, for commercial purposes; severe droughts which affected the remaining breeding grounds; and overshooting.

Since this State is on one of the principal lines of flight, the Atlantic Flyway, countless numbers of wild waterfowl cross its wide stretches, each spring and fall, to and from their nesting grounds, mostly in Canada. During these migratory flights they require water and marsh areas upon which to stop for rest and food, and where adequate protection is afforded. Consequently the State has an obligation to fulfill.

Recognizing its responsibility, the Pennsylvania Game Commission during the course of many years investigated the State's waters to find appropriate sites which could be developed into desirable resting, feeding, and perhaps nesting grounds. Many sites investigated provide satisfactory resting places, but almost invariably food, cover and seclusion are lacking. Experimental plantings of waterfowl foods were made in numerous small lakes, dams and river marshes, but with very little success.

Not until the long discussed Pymatuning Reservoir project became a reality was a really good waterfowl area available. Its twenty-five thousand acres of water, marsh and land contain practically all of the features required for an excellent waterfowl area. Portions of it have proven themselves adaptable to intensive management, especially for the production of aquatic and marsh plants which supply food and cover so badly needed for migratory birds.

Groups of sportsmen from western Pennsylvania, when the reservoir project was approved, gave their energetic support to the suggestion that a waterfowl refuge be established within the project area. The idea had been fostered by those sportsmen and the game commission through a long period of years, and every obstacle which

arose was effectively surmounted. But always the thought had to be kept in mind that the primary purpose of the Pymatuning Reservoir is to regulate the flow of water in the Shenango and Beaver rivers.

One ambition having been realized, another quickly came to light with the suggestion that sportsmen and others should be provided the opportunity of learning by observation the identifying characteristics of wild waterfowl and shore birds which are permanent or summer residents of the region, or which visit it during their migratory flights. This idea culminated in the Pennsylvania Game Commission's Pymatuning Museum in which to exhibit mounted specimens of such birds.

The Pymatuning Refuge comprises 3,670 acres in Pine, North Shenango, and Sadsbury townships, Crawford County, and includes that portion of the Pymatuning Reservoir project situated east of the highway crossing the original swamp south of Linesville, and extending to the Blair Bridge Road. Its northerly and southerly limits are the boundaries in this vicinity of the area purchased by the Commonwealth for the reservoir project.

In compliance with the expressed intent of the Act of 1931, a refuge agreement was executed May 1, 1935, between the Department of Forests and Waters, through the Water and Power Resources Board, and the Game Commission. This agreement was later replaced by a second agreement, dated January 13, 1937. Under its provisions nominal control of the 3,670 acres was placed in the game commission for wildlife purposes. The commission is authorized to establish and maintain a State game refuge within the area, with exclusive right to manage, control and utilize wildlife, as well as such vegetative resources as may be essential for wildlife food within the refuge.

The leased area of 3,670 acres includes 2,500 acres of water and marsh, and 1,170 acres of land, perhaps half of the latter being tillable and the remainder brush and woods. The 2,500 acres of water constitute the second or Upper Reservoir of the Pymatuning project. The lower or main reservoir is much larger but less desirable for waterfowl purposes.

The Upper Reservoir became possible due to the necessity of making a fill across the original swamp to carry the Linesville-Jamestown Road and the paralleling Pennsylvania Railroad. This embankment forms a second dam and by constructing a spillway the water in the Upper Reservoir is maintained at an almost stationary level,

1,010 feet above sea level, which is two feet above the flow line of the Lower Reservoir. The level of the water in the latter may be lowered as much as twelve feet when drawn off during dry periods to maintain a flow of water in the Shenango River. So great a fluctuation in the water level is, of course, disastrous to the existence of aquatic and marsh plants in the Lower Reservoir.

The embankment-dam with its spillway is the key to an almost ideal waterfowl area. Had not arrangements been made, by wise forethought, to hold the water in the Upper Reservoir at a uniform level throughout the year, it never would have been possible to provide and maintain aquatic and marsh plants essential as food and cover for waterfowl.

Ford Island, containing 103.3 acres, extending east of and accessible from the Linesville Road, upon which the Pymatuning Museum and the refuge keeper's home have been constructed, is a part of the 3,670 acres. It is, in reality, a peninsula extending from the fill made across the swamp to carry the railroad and highway.

A large proportion of the Upper Reservoir is shallow, seldom more than a few feet in depth, although there are deeper stretches along the old stream beds that reach a depth of fourteen feet.

When first filled, as could be expected, the water contained a high percentage of tannic acid, but this condition, detrimental to the growth of certain valuable aquatic and marsh plants, is rapidly clearing away. The muddy silt bottom of most of the Upper Reservoir is favorable to the production of marsh plants, of which there is now a prolific growth.

About four hundred acres near the Blair Bridge Road contain a very dense stand of black alder and other marsh plants, providing unlimited nesting possibilities for waterfowl and song birds.

Twenty-one low islands, varying in size up to several acres, dot the Upper Reservoir, and as they are often but a foot or so above the water level and densely covered with shrubs, trees, vines and marsh plants, they provide ideal food, cover and nesting areas.

Shortly after the Upper Reservoir filled, in March, 1934, natural stands of marsh plants and beds of aquatics developed. Sizable floating "islands" made their appearance on which duck foods quickly grew. These floating "islands" were huge masses of muck, partly decayed vegetation, tree stumps, logs, etc., which had lain for years at the bottom of the old swamp, and floated to the surface of the water after flooding. They are still making their appearance.

The irregular fringe of land surrounding the Upper Reservoir, totaling about 1,170 acres, is in some parts three-quarters of a mile wide. The shore is exceedingly irregular in outline and as the ground at many points is nearly level, delineation of a shore line is almost out of the question. There are many small lagoons and marshy bayous extending irregularly into the dry land areas, which are ideal sites for certain species of waterfowl that normally segregate in colony groups.

The Pymatuning Refuge, although small compared to similar areas maintained by the Fish and Wild Life Service of the United States Department of the Interior, presents the best wild waterfowl resting, feeding and nesting area in Pennsylvania. The requirements of such refuges are basically the same, and success depends to a large degree on several primary factors, such as desirable varieties of foods provided in quantities to meet all requirements of the many waterfowl species which can be attracted; cover of the types desired by the various species must be available, especially for those that nest in the area; extensive areas of shallow water, one to four feet in depth, having a mud bottom and a reasonably constant water level; reasonable control over the natural enemies of waterfowl must be exercised; seclusion is a requisite, molestation by human beings reacts against success in proportion to the extent it is permitted; the refuge should be located on or near the line of migratory flights.

Since one of the factors conducive to success of the Pymatuning Refuge is seclusion, particularly with respect to nesting birds, the commission deemed it wise to prohibit public entry into the refuge at any time of the year. By resolution unanimously adopted the commission decreed that no person other than officials in performance of their duties may enter the refuge area except by written permit issued from the commission's office in Harrisburg and very few permits are issued. Of course, hunting within the refuge is unlawful at any time, although it is permissible on the Lower Reservoir during prescribed open seasons.

Fishing and trapping in the refuge are likewise prohibited at all times. However, since the muskrat population in the Pymatuning is very large, and as these animals feed on certain marsh plants that are valuable food producers for waterfowl, their numbers in the refuge must be kept within reasonable bounds. Control measures are conducted by officers of the commission through trapping, the pelts being sold to the highest reliable bidder, and the proceeds deposited in the game fund.

Although the refuge is quite likely to be thought of primarily as a wild waterfowl area, its 1,170 acres of land support a large upland game population as well. This fact is frequently overlooked by sportsmen and the public in general.

Pennsylvania is not alone in developing certain of the resources of the Pymatuning Reservoir project for the benefit of wildlife. The State of Ohio, through its conservation commission, has established several refuges within its area, which provide protection and other necessities for waterfowl, shore birds, and upland game, the reservoir extending into that State.

WATERFOWL HUNTING IN THE PYMATUNING REGION

Reasonably good waterfowl hunting is now to be found in many marshes of the Pymatuning and Conneaut Lake region, and is improving. The improvement is due principally to an increase of birds resulting from better breeding conditions and reduced bag limits, but obviously the excellent food and cover conditions now existing within the Pymatuning Refuge are attracting more and more flight birds into the region in general.

The birds do not remain in the refuge during all of their few days' or few weeks' visit in this section, but drift from marsh to marsh. Evidently many of them, however, soon realize where safety from the guns of hunters can be found, for they fly to the refuge when disturbed.

The number of waterfowl hunters in this general region is likewise increasing, evidenced by the sale of Federal Duck Stamps. Most of them, with true sportsmen's philosophy, smile good naturedly when the birds they raise, and often miss, fly to the refuge for safety.

A few hunters are inclined to be somewhat critical of parts of the commission's Pymatuning program. One criticism occasionally heard is as to why the commission should exert all its efforts toward improving food and cover conditions within the refuge, and not plant waterfowl foods in the Lower Reservoir.

As a matter of fact the commission has made and is making experimental plantings in the Lower Reservoir, and will probably continue to do so in the future. Plantings now being made in the Lower Reservoir are principally of the floating type of aquatic plants. Since the shallow areas, those where marsh plants could exist if continually covered with even a few inches of water, are exposed to the hot sun when the reservoir is lowered only a few feet, there is little likelihood that any appreciable quantities of marsh or

aquatic plants can be expected in the Lower Reservoir. Nevertheless, many birds light there, supplying some shooting, and the commission is willing to do whatever it can within reason toward providing better shooting.

By agreement between the states of Ohio and Pennsylvania, reciprocal hunting is permitted on the central portion of the Lower Reservoir. This reciprocal hunting privilege does not apply to any part of the shore.

FEEDING GROUND FOR WATERFOWL

Even though the Upper Reservoir of the Pymatuning has practically all of the requisites for a successful resting, feeding and nesting area for wild waterfowl and shore birds, it is the commission's desire to improve food and cover conditions to the maximum. The refuge even now is a veritable de luxe feeding ground for migrating waterfowl, summer residents, and a host of other birds. Its well-stocked larders and abundant natural cover on land and water provide an exceptionally good home for permanent wildlife residents, including a number of species of upland game mammals and birds.

A thorough understanding and knowledge of waterfowl habits and the environmental forces affecting them are essential in planning improvements of existing food and cover conditions. In planning the development of the Pymatuning Refuge the United States Wild Life Service coöperated in conducting studies of different phases of the problem. Water analyses were secured; soils tested; and experimental planting of water and marsh plants made.

Luxuriant stands of cattails, sedges, smart weeds, water weed, coontail, etc., covered large areas of the shallow waters in a remarkably short time, and are still spreading. To supplement this natural growth large quantities of desirable species were secured elsewhere and transplanted in the refuge as well as in the Lower Reservoir. The commission also purchased large quantities of seeds and tubers from commercial dealers which were liberally supplemented by the Fish and Wild Life Service. Likewise, many thousands of surplus waterfowl food plants were transplanted from nearby waters to selected sites within the refuge by Works Progress Administration and other relief organizations. Among the more important plantings were wampee, wild rice, duck wheat, wild celery, wild duck millet, sago pond weed, etc.

Food conditions in this excellent feeding ground are further augmented for both waterfowl and upland game birds by annually sow-

ing grains of various kinds in the fields surrounding the Upper Reservoir, and on Ford Island. The plots used exceed seventy-five acres. The favorite grains sowed are wheat, oats, corn, kaffir corn, buckwheat, millet, duck wheat, as well as other varieties. Approximately two-thirds of the grain is harvested and stored for feeding when natural foods become scarce or inaccessible. Large quantities of it are fed during the spring migration and during the height of the flights in the fall. The other third is left standing in fields conveniently accessible to wildlife, both migrant and resident. Literally thousands of birds feed on this grain. Feeding shelters of various kinds have been provided, the corn-shock type appearing to be most popular to both waterfowl and upland birds.

Prior to the establishment of the refuge, and for a year or so thereafter, an association known as The Pymatuning Conservation Club, organized largely through the energetic efforts of John M. Phillips, of Pittsburgh, a former president of the game commission, provided grain for feeding when needed. They contributed about \$400 per year, the money having been placed at the disposal of the game protector, who purchased the grain and distributed it. Such donations are no longer needed, since all grain required is now raised within the refuge area. However, the fine evidence of sportsmanship displayed by this group of wildlife philanthropists deserves recognition. Other groups from time to time have aided the movement in one way or another.

Wooded and brush areas bordering the Upper Reservoir furnish food for wildlife in the form of acorns, buds, grapes and berries, and, likewise, provide retreat areas with abundant cover. Thousands of evergreen seedling trees, as well as many shrubs and vines, have been planted in some of the old fields and on the several islands within the refuge area for reforestation and other purposes. These plantations provide very desirable and almost unlimited nesting sites, augmenting natural food and cover.

Cray-fish, snails, larvæ, flies, water beetles, grasshoppers and many other insects are present in prolific numbers. They constitute an important item of food for birds of all kinds, and although extremely annoying to humans are a decided asset to wildlife.

The genial host of this de luxe feeding ground is Game Protector Burt L. Oudette, who resides in a dwelling constructed in 1937 by the game commission on Ford Island near the museum. He gives careful attention to the "guests," whether they be transients stopping only during migratory flights; whether they spend the summer and

raise their broods, then fly South with the approach of winter; or whether they make the area their permanent residence. Mr. Oudette is unusually well acquainted with the names, habits and requirements of the many visitors and residents of the refuge and surrounding area, and particularly well qualified for the office he holds.

THE REFUGE A HAVEN FOR WILD LIFE

It seems almost incredible that the Pymatuning Refuge, considering the short period of its existence, should harbor so large a number and variety of birds and mammals as it does. There are times, of course, when the ordinary observer might conclude that comparatively little wildlife is present, for perhaps only a few semi-domestic mallard ducks are to be seen near the spillway of the upper dam, with but few birds in the air, and no other animal in sight. His attention is more likely to be attracted to the thousands of carp being fed bread or scraps of meat by interested visitors at the spillway.

Unfortunately he does not have, nor can he be given, the opportunity of visiting the secluded habitats of the nesting or resident species. Searching for birds and nests in the tangled mass of swamp vegetation is a difficult task, requiring a great deal of time and patience, but of even greater importance is the fact that such birds would leave the refuge if disturbed by the curious thousands who might want to search for them. Persons visiting the region during the periods of migration may, however, secure the unforgettable thrill of seeing many thousands of ducks and geese in the air, or if they use good binoculars, on distant waters.

Some authorities believe that there is a greater variety of wildlife in the Pymatuning Refuge and its immediate vicinity than in any other area of its size in the eastern United States. It is readily admitted, of course, that larger numbers of waterfowl, shore or other birds are present at certain periods along some of the coastal areas.

Observations by Game Protector Oudette indicate that the summer population of waterfowl and shorebirds, including the season's hatch, within the refuge in 1938, exceeded eight thousand. He reported that a much larger number of ducks nested and raised families that year than during any previous year, and by the first of September the young ducks had taken to wing.

A list of migratory waterfowl and shorebirds reported by various competent observers as visitants or summer residents of the Pymatuning region, and recorded by the game commission, reveals well over one hundred species. The principal sources of reports are Dr.

George Miksch Sutton's "An Introduction to the Birds of Pennsylvania," Game Protector Burt L. Oudette, and Dr. W. E. Clyde Todd, Ruth Trimble and R. L. Fricke, of the Carnegie Institute, Pittsburgh.

The gadwall, redhead, ring-necked duck, ruddy duck, and the American widgeon or baldpate were newcomers during the years 1937 and 1938. Bald eagles have nested in the refuge during the past few years, a more or less rare occurrence in Pennsylvania. Twenty-eight were reported present in August, 1938.

Nesting generally takes place during the month of May, although several duck nests with eggs were reported April 14, 1938, and the ducks were observed setting May 1. This was probably due to unusually warm weather in early spring. An interesting occurrence reported by Mr. Oudette was the finding of a nest containing eight ring-neck pheasant eggs and eight shoveller duck eggs several years ago. The nest was evidently constructed by the pheasant and usurped by the shoveller duck.

The commission secured thirty Canada geese in June, 1936, which were pinioned and released in the refuge. Several disappeared, but those remaining have nested each year since and raised their young to maturity. The young birds in the fall usually follow migrant geese to southern waters. However, full-winged birds are now nesting in the refuge. Ice usually covers both Pymatuning reservoirs throughout the winter, so the pinioned birds must be given assistance during this period. Forty to fifty of them can be housed in a special building constructed on Ford Island for the purpose.

The refuge and the Lower Reservoir are attracting innumerable flight birds each spring and fall. The fall migration generally starts with a few flights of geese which appear from the north and northwest early in September, and the peak of the geese flights is reached between October twentieth and November fifteenth. The peak of the duck and shorebird flights usually occurs between the tenth and thirtieth of November, although a few stragglers show up as late as the fifteenth of December.

The first northerly flights in the spring usually start about the first of February and the peak for all species is reached between March twentieth and April fifteenth, although small flights are observed as late as the thirtieth of April.

A waterfowl census within the refuge was taken October 17, 1935, jointly by the Pennsylvania Game Commission, the Ohio Conservation Commission, and others interested. It disclosed a varied

duck population much larger than had been expected. The majority of ducks, approximately seventy-two per cent., consisted of blacks, baldpates and mallards, but a total of fourteen species was observed. In addition to ducks, many other species of birds were noted, chiefly coots, Canada geese and pied-billed grebes.

A similar census was conducted in October, 1936, by the United States Biological Survey and the Pennsylvania Game Commission, which indicated between sixty thousand and seventy thousand waterfowl present. Many remain several days to rest and feed before continuing their travels, and literally tons of food are consumed, the natural foods being augmented by grain distributed by officers of the commission and others.

Of more than customary interest is a heronry of some fifty nests of black-crowned night herons along the northeasterly side of the refuge area. Their presence is unusual in this region and due, in all probability, to the countless number of food fish in the Upper Reservoir.

Also interesting is the fact that American and snowy egrets have visited the refuge in recent years, arriving in June. Early in September, 1938, one snowy egret and four American egrets were secured as specimens for the Pymatuning Museum. They contained eighty-seven fish, the majority being sunfish up to four inches in length. Others included catfish one of which was seven inches in length, yellow perch, large-mouth black bass, shiners and three small carp.

An extraordinary visitor in the early summer of 1938 was a great white heron, a species not supposed to range farther north than North Carolina. The specimen was secured in May, 1938, and will be carefully preserved in the Pymatuning Museum.

Duck hawks occasionally pass through this area, although a rare occurrence. They have the reputation of preying on ducks and other birds. Mr. Oudette reported that on April 18, 1938, he observed a duck hawk overtake a female scaup in full flight. The hawk hit the duck, holding and carrying it to a small island. Leaving the scaup, the hawk took off again and killed a coot, but left it lying on the water.

Although cormorants are not ordinarily expected in such sections as the Pymatuning, the double-crested has been observed in the refuge each spring and fall the past few years. The largest number counted in one flock was seventeen on October 25, 1938. Two specimens were collected for the museum. They feed on fish, which are caught by diving from considerable heights, and pursuing their victims under water.

On the strip of land surrounding the Upper Reservoir, and within the refuge, cotton-tail rabbits, squirrels, ring-neck pheasants and bob-white quail are abundant. Deer and raccoons are likewise present. All upland game is increasing in numbers and spreading to adjoining lands, where hunting is reported better than ever before. More than four hundred rabbits were trapped within the refuge during the spring of 1938 and used for restocking open hunting areas in other sections of Crawford County.

ORIGIN OF THE PYMATUNING SWAMP

The Pymatuning Swamp, now the reservoir, is a scythe-shaped body of land, marsh and water in the western part of Crawford County, Pennsylvania, and the eastern part of Ashtabula County, Ohio. Its northern extremity is about twenty miles in a direct line south from Lake Erie, and the southern extremity is near Jamestown, in Mercer County, Pennsylvania.

The swamp, with the several small streams emptying into it, comprises the headwaters of the Shenango River. The Shenango, flowing in a southerly direction, empties into the Beaver River at New Castle about sixty-four miles below the swamp. The Beaver River, in turn, empties into the Ohio River at Rochester below Beaver Falls, about eighty-eight miles from the swamp.

The swamp proper comprised about ten thousand four hundred acres and was about fifteen miles long and two and two-tenths at the widest point.

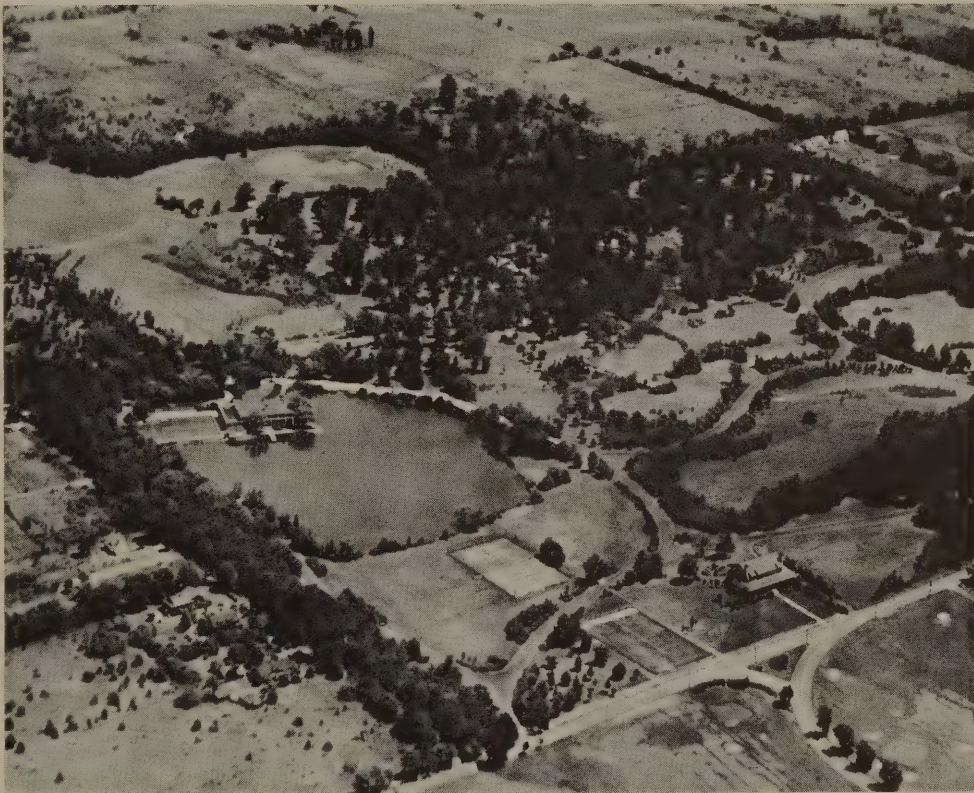
The name Pymatuning is obviously of Indian origin, and according to historians means "The crooked-mouthed man's dwelling place." John G. E. Heckewelder, an early missionary, who spent considerable time in this region, reported that he was acquainted with a Delaware Indian named Pihmtomink, to whose deformity allusion is made. Whether Pihmtomink was a chieftain or a big medicine man, or merely a hunter of renown, is not disclosed.

Dr. George H. Ashley, State Geologist, is authority for information that the swamp was the child of the last Ice Age. Prior to that all the drainage was northward and northwestward. Now it is southward. The old drainage lines are buried deep below thick deposits of glacial drift left by the ice, and the exact relation of the old drainage lines of the Pymatuning area to the major drainage lines is not entirely clear. The site was a valley, or perhaps a series of valleys, drained at either end by streams flowing northward.

Then came the glacial ice, thousands of feet deep at the north, traveling southeast across the Lake Erie region, and riding rough-

shod over all this area, only stopping when it reached a line running through Tidioute, Franklin, West Liberty, Portersville, Ellwood City and into Ohio. This great wall of ice closed the outlets of all the northward or northwestward flowing streams, damming their waters, with the result that the streams were forced to find new channels southward.

Then the climate turned warm and the ice retreated leaving the old valleys deeply clogged with materials it had scraped up. The



Air View of Buhl Farm, Sharon Park, Gift of the Late Frank H. Buhl

streams continued to flow through the newly-made channels southward.

Later another change in climate brought the ice back again almost to its old position. This was followed by still another change in climate and again the ice retreated leaving vast quantities of sand, clay and boulders spread over the land. The ice paused, apparently, just north of the Pymatuning area, leaving a dump of transported material which is part of the noted Cleveland moraine. From this moraine long arms extended southeast as if made by projecting lobes

of ice. One followed down the east side of the Pymatuning-Crooked Creek area, and two between the Shenango River and the Pymatuning Creek. In front of this mountain of ice waters gathered forming a large lake.

The transformation from lake to swamp required many centuries, the lake gradually filling with sediment from feeder streams. Evidently most of the filling-in process, however, resulted from dense masses of shallow water plants. Then plants requiring less water became established, producing the luxuriant masses of vegetation customarily found in swamps.

INDIAN LEGENDS RELATING TO THE PYMATUNING

The Pymatuning Swamp was a place of considerable interest to humans long before the white man knew of its existence. According to historical records it was a favorite resort and hunting ground for the Indians from the South and West and many traditions concerning it have been handed down from them.

It is generally supposed that the region surrounding the Pymatuning was occupied by a race that preceded the North American Indians whom the early settlers encountered. These earlier peoples, supposedly, were of the same race as those who erected the well-known mounds and fortifications so numerous in Ohio and the Mississippi Valley.

The permanent villages of the Indians the white settlers knew, according to traditions, were located in what is now southwestern Pennsylvania and Eastern and Central Ohio. Tradition tells us that hunting parties each fall left their villages and established temporary hunting camps in the region south of Lake Erie, and evidently extending to the Pymatuning area. Here they hunted for the tribe's winter supply of meat, as well as furs for clothing and household uses.

Before the white man supplied the Indians with guns and ammunition the problem of securing food was difficult, and frequently during the winter months large numbers of the Indians starved or froze to death. Due to the limited range of their arrows it was important that their hunting grounds be well supplied with game. This was not always the case.

Various methods of hunting were used by the braves, the most common being by stalking their game, in which Indians excelled. Often they lay in wait along a trail used by game, or set "dead-falls" along such trails. Another method used in taking game was for the hunters to divide into two groups, the larger group forming a line

some distance from a river or other body of water, and driving the game into the water, where the second group in canoes tomahawked the almost helpless animals. A variation of this method was that of setting fire to a grassy area and having the fire burn to the water's edge, where the slaughter took place. According to historic records, Indians in the Pymatuning and Lake Erie region used all of these methods, but the favorite evidently was driving the game to water.

Beavers and otters are recorded as having been very abundant in the Pymatuning Swamp, and after the white settlers arrived great canoe loads of valuable pelts were taken down the Shenango River to be traded for guns, ammunition, liquor and trinkets.

One interesting account is that the Indians supplied the early settlers in the region of the swamp with salt. The fact that the salt was warm when delivered led to the belief that it was obtained in the vicinity of the swamp. Many attempts were made to determine where and in what manner the salt was obtained, but this remains a mystery.

Ruins of two Indian forts were found in the Pymatuning Swamp by the early settlers, one of which is described by Alfred Huidekoper in "Incidents in the Early History of Crawford County," written in 1846. He wrote:

"The most perfect of the Indian fortifications is a circular stone fort still in a tolerable state of preservation, in 1846, which stands on a point of land projecting into Pymatuning Swamp in North Shenango Township. The area of the fort includes some two acres of ground now covered with timber. The breastwork is about three feet high and the fosse (ditch) from two to three feet deep. There are from four to five places of egress from the fort, where there are intervals in the ditch. The breastwork had probably been fortified with a stockade and the portals occupied with gates on the land side, or opposite side to the swamp, in another breastwork some twenty or thirty yards from the fort and now less distinct. On top of the breastwork trees are now growing, one of which, a white oak, measured more than ten feet in circumference. In the neighborhood of the fort are Indian graves and remains that have not yet been explored."

The site of this old fort evidently is now under water in the main Pymatuning Reservoir. The site of the other fort is reported to be on the eastern edge of the refuge, a mile or so west of Shermansville.

EFFORTS TO CONVERT THE SWAMP TO THE BENEFIT OF MAN

Early settlers in northwestern Pennsylvania found the slopes extending to the swamp covered with forests of large pines, hemlock and hardwoods, and the lowlands contained tamarack and other commercially valuable species. In later years huge quantities of tamarack and hardwood timber were removed, furs of inestimable value were secured and commercialized, and in more recent years hundreds of bushels of huckleberries were gathered and marketed.

Efforts of various kinds had been suggested from time to time to convert the resources of the swamp in a greater degree to the benefit of mankind, most of them in earlier years being based on draining it. One suggestion contemplated its use as a link in a canal system connecting the Ohio River with Lake Erie.

The first proposal on record for draining the swamp was in 1843, when the Representative from Crawford County introduced a resolution in the General Assembly proposing a survey to determine the possibility of draining the entire swamp area, converting it to agricultural uses. This resolution, however, did not receive sufficient support to cause its passage.

In 1868, however, the General Assembly passed a resolution authorizing a survey to determine the feasibility of draining the swamp, and its probable cost. The survey was made by Col. James Worrall, who reported the plan not only feasible, but also submitted a working plan. Fortunately, no further action on the plan was taken by the Commonwealth, and the idea lay dormant for thirty-nine years.

In 1907, the Legislature appropriated money for the Pennsylvania Highway Department to make another survey to determine the best course and method of making channels for draining the swamp and improving the highways therein. Plans for the proposed drainage were submitted to the Water Supply Commission in 1909. Public hearings on the plan were held by that commission, during which a number of protests were made on the ground that the swamp was a valuable storage basin and helped maintain a more equal flow of water in the Shenango River. The commission, therefore, refused to sanction the drainage plan, but instead recommended consideration of a reservoir project.

The Legislature in 1911 appropriated \$10,000 to the Water Supply Commission to examine into the feasibility of converting the swamp into a reservoir. The report to the Legislature in 1913 was that the reservoir project was feasible and that benefits would accrue

not only to the various communities along the Shenango and Beaver rivers, but likewise to the State at large.

Attempts had been made to drain portions of the swamp and to use the black muck soil for the growing of onions as well as for other agricultural purposes. About five hundred acres near Linesville had been reclaimed by drainage ditches and used more or less successfully, but attended with many difficulties. The cost of clearing and ditching, according to authoritative sources, amounted to about \$100 per acre. The ditches, unfortunately for the venture, but fortunately for wild waterfowl, proved unsatisfactory, because the ditches required continual cleaning. Finally the reclaimed lands was largely neglected, the muck dried out and deteriorated, and the once reasonably profitable business was abandoned.

At one time a company had been formed for the recovery of muck or marl near Hartstown for use as a fertilizer base, but that venture likewise failed.

When the Pittsburgh, Bessemer & Lake Erie Railroad was being constructed across the swamp great stretches of fill, and even cars sunk out of sight overnight. Spliced piles two hundred feet long were driven into the swamp before a footing was found firm enough to support the fill. Similar sinking of fills was later encountered in constructing a highway across the swamp. The mucky bottom simply "oozed out" from beneath the fill, and immense quantities of rock and earth were required before firm footings were secured.

The birth of the Pymatuning Reservoir project, benefits of which are accruing to wild waterfowl and to sportsmen, can be considered as having taken place when the Water Supply Commission rejected the drainage plan and, in 1913, recommended the construction of a dam and reservoir.

"The Pymatuning Dam Act," passed by the Legislature in 1913, carrying an appropriation of \$100,000, directed the Water Supply Commission to erect a dam at the outlet of the Pymatuning Swamp for the purpose of establishing a reservoir to conserve the water thereof, and to regulate the flow of water in the Shenango and Beaver rivers. The Act provided, however, that the entire area must be acquired before actual construction started. Subsequent amendments were passed and necessary funds appropriated, and the laborious task of purchasing the 350 tracts comprising the area proceeded, although slowly. Similar enabling legislation was passed in the State of Ohio, with the exception that it would be necessary to raise by public subscription the funds required for the acquisition of lands.

In 1925 the Legislature repealed all previous Acts pertaining to the Pymatuning project and combined all of their provisions in one, and transferred the authority from the Water Supply Commission to the Department of Forests and Waters, acting through the Water and Power Resources Board. The acquisition of land continued and, in 1931, when the Legislature appropriated funds for the construction of the dam, almost twenty-five thousand acres had been acquired, including 4,740 acres in the State of Ohio from subscribed funds. The original plans for a single dam at the swamp outlet was altered and provision made for the second dam, which now makes the Upper Reservoir.

Land clearing operations and the construction of the dam were started in the fall of 1931. The gate on the upper dam was closed December 5, 1933, and that of the lower dam January 23, 1934, twenty years after the Pymatuning Dam Act was passed.

The Upper Reservoir filled with water to an elevation of 1,010 feet above sea level early in 1934. This level will be maintained except for slight variations during high and low flow periods. The Lower Reservoir filled to an elevation of 1,008 feet above sea level during the winter of 1935-36.

The two reservoirs have a capacity of 64,275,000,000 gallons. The Lower Reservoir is subject to a changing water level as the water is drawn off during dry periods to maintain a more normal flow in the Shenango River.

The vast expanse of the reservoirs will absorb sufficient rainfall in the area to obviate floods that would otherwise occur in the Shenango River. No damaging floods have occurred in the Shenango or Beaver River valleys since the project was completed.

Of the twenty-five thousand acres in the Pymatuning Reservoir project, about seventeen thousand acres are included in the two reservoirs with a total shore line of about seventy miles. The balance of the area acquired, or about eight thousand acres, completely encircles the reservoirs and is used largely for public recreational purposes, excepting, of course, the 1,170 acres surrounding the Upper Reservoir, comprising the refuge.

The two reservoirs cover an area of nearly three times that of the artificially constructed Lake Wallenpaupack in Wayne and Pike counties, which is the next largest lake in Pennsylvania. The Pymatuning is eighteen times the size of nearby Conneaut Lake, the largest natural lake in this State, having an area of 928 acres.

FLORA AND FAUNA OF THE ORIGINAL PYMATUNING SWAMP

The Pymatuning Swamp, before construction of the reservoirs, was a huge wooded bog containing prolific vegetation made up of an unusually large variety of trees, shrubs, vines and flowers, as well as marsh and aquatic plants. Swamps and marshes invariably contain rank vegetation combined with myriads of insects, the combination attracting innumerable species of birds and other wildlife. Such swamps fascinate the naturalist, but as they are difficult, unpleasant and often treacherous places through which to walk, hunters and others are inclined to avoid them. Their natural conditions are less apt to be ruthlessly altered by man, and they remain a place of genuine interest to naturalists.

Because of its wealth of flora and fauna the Pymatuning Swamp had long been a place of delight to naturalists, and many interesting and instructive treatises on these subjects have been written. Of particular interest is Dr. George Miksch Sutton's "The Birds of Pymatuning Swamp and Conneaut Lake" reprinted from the annals of the Carnegie Museum in 1928, in which he listed 244 different species of bird residents or visitants in this region. Additional species have since been observed.

The Pymatuning region was, according to reports, a favorite roosting place for the now extinct passenger pigeon during the spring and fall migrations. One writer states that:

"In the evenings the sound of their wings in rapid flight resembled distant thunder as they came fluttering and covering the trees and bushes, many of which gave away with their weight. They were killed in incredible numbers and were so numerous that they could be knocked off the limbs by the dozen with a club, and even picked by hand from the bushes."

Dr. William R. Van Dersal, in "An Ecological Study of Pymatuning Swamp," reprint from "University of Pittsburgh Bulletin," November, 1933, stated that 466 species of plants, representing 254 genera and ninety-four families, were present in the swamp and immediate vicinity.

Several distinct classes of plant associations were abundantly represented within and near the swamp, ranging from the dry land species, through the bog species, to those of a strictly aquatic nature. Of interest was the large quantity of tamarack timber, a species

existing in but a few localities in Pennsylvania, as well as the comparatively rare pitcher plant found in only a few of the State's swamps.

Other species of trees and shrubs common to this region were hemlock, white pine, black birch, swamp maple, black ash, beech, red and black oaks, cucumber tree, yellow poplar, black gum, hickory, white elm, black locust, chestnut, black walnut, willow, dogwood, black alder, spice bush, poison sumac, high huckleberry, wild plum, crab apple, hawthorns, hornbeams, aspens, etc.

Among the low growing vegetation were many varieties of ferns, sphagnum moss, skunk cabbage, marsh grasses of various kinds, sedges, cattails, pond weeds, pond lilies, arrow leaf, etc.

According to historians, buffaloes, elk, deer, bears, wild turkeys, beavers, martens, otters, panthers, wolves and wildcats were common in this section during the time of the Indians, but were wiped out by the white man. Deer have again made their appearance. Among the other species of animals now present in the refuge are: muskrat, weasel, opossum, skunk, raccoon, grey, red, flying and fox squirrels, chipmunk, red fox, woodchuck, beaver, mink, cotton-tail rabbit, bats, mice, shrews and moles, and a variety of snakes, frogs and toads, etc.

Such were the conditions in the Pymatuning Swamp before being converted into a huge reservoir, or more accurately two reservoirs, only a few years ago. So large a variety of classes, and of species and varieties of flora and fauna covering an extensive acreage was the exception in Pennsylvania, and, as can be expected, there was some opposition to any proposal for changing the peculiarly interesting and instructive conditions created by Nature.

Fortunately the upper of the two reservoirs, now the refuge for wildlife, although more a body of water than a marsh, and even portions of the lower and larger reservoir, still include large areas of swamp and marsh where flora and fauna of a most interesting nature exist. Compensating for some of the losses of natural phenomena is the fact that wild waterfowl have been provided an exceedingly favorable place to rest and feed during spring and fall migrations, and for many species to nest.

Conditions nearest those which originally existed in the swamp are now found within a small area comprising the upper end of the Pymatuning Reservoir project, southeast of the refuge near the Blair Bridge. This area of several hundred acres is exceedingly difficult to penetrate and if, as seems probable, it is not changed through the agencies of man, the flora and fauna there will continue

to be quite similar to that which existed in the original Pymatuning Swamp.

THE MUSEUM

The enormous educational possibilities surrounding the wildlife resources of the Pymatuning were fully recognized when the refuge was established. It was evident that comparatively few persons would have an opportunity of seeing even the resident or nesting species, much less the many varieties which merely stop to rest and seek food during migration. The game commission therefore decided to provide a building, in conjunction with the refuge, in which to display mounted specimens of wild waterfowl and shore birds for the edification of the public; and where interested groups could meet, discuss their problems, and study the identifying characteristics of species exhibited.

The site selected was a high point on Ford Island, or more correctly a peninsula, since the "island" is now merely a projection from the fill supporting the State Highway and the Pennsylvania Railroad tracks. The museum is a little less than a mile south of Linesville and easily accessible from the highway. From it is obtained an excellent view of both the Upper and Lower reservoirs.

The museum was constructed and is being maintained entirely from the game fund, a fund derived from the sale of hunting licenses in Pennsylvania. No part of the cost has been or is being paid from general State revenue or taxes.

It is a one-story frame structure of rustic design, eighty-eight feet long and twenty-two feet wide, outside dimensions. The ten-inch cedar siding and wood shingle roof are creosote-stained a nut-brown color. Through it is a flagstone paved open passageway fourteen feet wide.

The exhibit room is fifty feet by twenty feet, with its interior walls lined with homosote imitation plank of grayish color. The ceiling is the open-beam type, and the floor of flagstone. Rest rooms provided for ladies and men are separated from the exhibit room by the open passageway. A flagstone terrace outside the main entrance to the exhibit room adds greatly to the appearance and usefulness of the building. The best view of the refuge and reservoirs is secured from this terrace.

Twelve large aluminum and plate glass exhibit cases have been provided in which to display mounted specimens. They are practically dust proof and provide protection against deterioration and handling of the specimens, an essential safeguard.

Benches, chairs, and registration desk in the museum, as well as rustic chairs and benches conveniently distributed over the surrounding grounds, were made by the National Youth Administration from plans especially designed for the purpose by Haline Leszcynska, of that organization.

With unaffected simplicity, individual designs were created for chairs and benches. A touch of distinction is given them by introducing into the designs waterfowl forms, making them alive, attractive, and strikingly appropriate for this unusual museum. Chairs and benches work together to produce harmony. Contrasting with the chairs' silhouetted splat, representing two ducks facing in opposite directions, is the bas-relief stretcher of the bench with its carved duck in flight and two ducks swimming. Just the right touch of gaiety, without loss of dignity, is given by the ducks' frivolous, curved-up bills and tails in the splat of the chair.

Full advantage has been taken of the flagstone terrace. Comfortable rustic chairs and benches made of unpeeled red cedar logs and oak boards are placed there, as well as in other portions of the grounds, providing pleasant places to sit and enjoy the excellent view of the refuge and reservoir.

The museum was completed late in the summer of 1938 and formally dedicated and opened to the public on the fifteenth day of October. Although the refuge was established in 1935, no special recognition had been given that important event, so the refuge was dedicated in conjunction with the museum.

Exhibits are limited primarily to wild waterfowl and shorebirds. The commission is endeavoring to display both sexes of species that are either summer residents or migrants of Pennsylvania; and in their various plumage phases of spring, summer and fall, especially where a marked difference is evident. In addition to those displayed in glass cases, a number of specimens of various species are suspended from the ceiling, representing the birds in flight, a method of display helpful to sportsmen and others in identification when flying.

The collection now comprises approximately three hundred specimens, representing sixty-six distinct species and one hybrid, a few of which are other than waterfowl and shorebirds.

All but a few of the specimens were collected within the refuge under collecting permits issued by the Fish and Wild Life Service of the United States Department of the Interior. Most of them were collected and identified by J. Aug. Beck, a former member of the game commission, of DuBois, Pennsylvania, prior to his untimely

death, November 12, 1939, and by Burt L. Oudette, game protector in charge of the refuge and museum. All specimens were expertly mounted by the Beck Taxidermy Company, DuBois, under the direction of Mr. Beck, until his death, and since then under the efficient guidance of Frank W. Bauder, who has been a taxidermist for this company for many years. The collection and preparation of such an exhibit requires time, patience and technical knowledge of birds and their life habits, and much credit is due those who have been conducting this part of the program.

Special attention is invited to the Great White Heron, Exhibit Case No. 2, Specimen No. 32, a rare species found chiefly in the southern part of Florida, especially on the Florida Keys. According to Dr. Harry C. Oberholser, Senior Biologist of the Fish and Wild Life Service, there is only one previous record of the capture of one of these birds far north of its natural range, and that was in North Carolina. For some unaccountable reason it visited the Pymatuning Refuge in May, 1928, and was secured by Mr. Oudette. At least one other bird of the same species visited the refuge in October, 1938, and motion pictures were secured of it. The identity of the bird was at first questioned, but upon making a thorough examination of the mounted specimen on November 6, 1938, Dr. Oberholser declared that it was without a doubt the great white heron. It is one of the rarest of North American birds and is being carefully protected in its natural home chiefly through the efforts of the National Association of Audubon Societies and the United States Fish and Wild Life Service.

Another specimen of interest is the Golden Eagle, Case No. 7, Specimen No. 117. It was secured in Lycoming County, Pennsylvania, about a mile from the Loyalsock Game Farm, on March 10, 1938. Dr. Ira N. Gabrielson, director of the Fish and Wild Life Service, believes the bird was fifty or more years of age when it was unfortunate enough to get caught in a trap, and thus found its way into the Pymatuning Museum.

An exhibit which provides considerable interest is the group of blue-winged teal, consisting of mother bird and nine ducklings, displayed in Case No. 3.

The popularity of the museum became apparent directly after it was opened, even more so than was anticipated. During the first thirty days after its opening a total of 5,514 visitors registered in the book provided for that purpose, and on one day alone 960 persons registered.

Unfortunately, not all of the visitors take time to register. It was estimated that 24,000 persons visited the museum during the first thirty days of its existence. During the period of eight months, from October 15, 1938, to June 15, 1939, registrations amounted to 13,590, and the total number of visitors was estimated to be 42,359. It is now estimated that 2,500 persons visit the museum each week. The largest number estimated for one day was 6,000 on July 4, 1940. About fifty groups of school children visit the refuge and museum each summer, which is a fact worthy of note.

The public is extended a cordial invitation to visit the museum and view the exhibits. No charge is made for admission. The museum is kept open to the public from May first to November thirtieth. The hours when it is open are: July first to September thirtieth, inclusive, from 10:00 A. M. to 7:00 P. M. on Wednesdays, Sundays and legal holidays; and from 1:00 P. M. to 7:00 P. M. on other days. For the balance of the period between May first and November thirtieth, inclusive, the open hours are the same as above, except that the closing hour is 5:00 P. M. Visitors will find ample parking space on Ford Island, a few hundred feet from the terraced entrance to the museum. Two winding trails lead from the parking area to it.

As has previously been stated, the intent of "The Pymatuning Dam Act" was to provide for the erection of a dam at the outlet of the Pymatuning Swamp for the purpose of establishing a reservoir to conserve the water thereof, and to regulate the flow of water in the Shenango and Beaver rivers. Thus the frequent disastrous floods in the Shenango and Beaver valleys would be eliminated and, as had occasionally happened, large industrial plants would not have to be shut down in dry periods on account of the lack of water.

When the project was discussed, and during construction and following the completion of the project, there was much criticism and many persons were very firm in their arguments that the reservoirs would never fill.

However, the faith of the engineers in the plan has been entirely justified, providing the valuable service anticipated, as well as additional benefits which have been related.

PENNSYLVANIA A GREAT FISHING STATE

It is an interesting fact that in the thickly populated industrial State of Pennsylvania there exist such favorable conditions for both hunting and fishing. Almost half of Pennsylvania's twenty-eight mil-

lion acres is forest lands; the balance mostly farms. Of the forested lands only about eight million five hundred thousand acres constitute good deer range; the remainder is widely scattered in small parcels not actually large enough for desirable deer range, but excellent for small game.

The excellent hunting and fishing opportunities of the State result not alone from the natural conditions that exist, but also largely from the outstanding services of both the game and the fish commissions of the State in conservation and propagation.

The waters of the State abound in fish of the various species and the northwestern section of the State is one of the favorite fishing regions.

In the early spring at the opening of the trout season, thousands of fishermen patrol the trout streams and are rewarded by taking therefrom the various species of trout, the rainbow, speckled, German brown, etc., that abound in the cold mountain streams.

Later, when the season opens for other game fish, great numbers of disciples of Izaak Walton from other parts of the State, and from other nearby states, move into the numerous fishing camps and lodges along the waters of the Allegheny River and French Creek and the tributaries of those streams in their quest for black bass, small and large-mouthed; rock bass; croppy bass; wall-eyed pike or Susquehanna salmon; muskellunge and other species of fish found in these waters.

State fish hatcheries are located at Erie, Corry and Union City, in Erie County; at Tionesta, in Forest County, and at the Pymatuning Lake. The grounds at the fish hatcheries are beautifully landscaped and are very attractive, and thousands of visitors find them of interest.

"Pymatuning sanctuary with its 2,500 acres of water churning with tons of fish is Pennsylvania's arsenal of angledom," says Fish Commissioner C. A. French, describing the hatchery skirting the 64,275,000,000-gallon Pymatuning Reservoir in Crawford County.

It is the world's largest natural fish hatchery and it is filling the majority of requirements for stocking the State's inland streams. About two years old, the fish farm was first established to relieve the fish-crowded adjoining reservoir and has grown into a maze of dykes, criss-crossed and subdivided by ponds and nursery batteries.

There are groomed for future quarry tons of wall-eyed pike, bass, yellow perch, carp, catfish and sunnies.

Pike eggs, formerly purchased from outside sources and yielding only a fifty per cent. hatch, are obtained from the reservoir and show a ninety per cent. yield.

In farming this section of water the commission maintains a year round schedule with net trap work being carried on from the time ice melts in the reservoir in the spring until the water freezes.

Fish eggs for incubation are obtained from netting operations, while staked-off spawning grounds afford breeding places for bass and other species.

In addition, at least twenty tons of carp are annually lifted from the causeway which connects the reservoir and the hatchery and transferred to every part of the State. Visitors who frequent the spillway of the Upper Dam find amusement in casting pieces of bread upon the water, resulting in thousands of carp rising to obtain them, and pictures have been taken showing the mass of fish so great that ducks are seen walking over the fish.

Mr. French has said: "I wish every fisherman could see the Pymatuning hatchery, for in that way and that way only would they realize the magnitude of the job of keeping streams stocked for their benefit."

Throughout the entire northwestern Pennsylvania region there are sportsmen's clubs and associations which are active in coöperating with and supplementing the efficient work of the game and fish commissions, thus constantly improving the conditions which now cause the region to be recognized as one of the outstanding hunting and fishing areas of the great Keystone State and of the Nation.

STATE INSTITUTIONS IN THE REGION

Two institutions in the region administered by the Pennsylvania Department of Welfare are recognized as being outstanding in their respective classes throughout the world.

The Polk State School—The Polk State School, located at Polk, Venango County, six miles from Franklin, on Route 62, was established during the administration as Governor of Robert E. Pattison and was opened on April 21, 1897.

This institution is devoted to the care and training of mentally deficient children; many of the resident patients are of adult age, but are possessed of a mental age of eleven years or less. Patients receive sense training through the sixth grade, and approximately forty vocational fields are taught. In addition to all proper medical treatment, occupational therapy is also used.

The many fine and well-planned buildings surrounded by the beautifully landscaped and well-maintained grounds, located in a very attractive natural setting, present a most pleasant view to the eye of the visitor, and provide all of the essential needs for the protection, care and training of the less fortunate of God's children who constitute the patient population of this remarkable institution.

The approximate patient population is 3,300, and the personnel population is approximately four hundred.

The institution comprises 2,041 acres, over six hundred acres of which are devoted to agriculture. Much of the food required to maintain the large population of the institution is produced on the State property, the value of the farm products approximating \$125,000 per year. The number of dairy cows and of pigs is maintained at approximately three hundred for each. The capital investment in this institution is \$5,000,000.

On the property there are over five hundred thousand coniferous trees which have been propagated in conjunction with the State's reforestation program.

The institution has a large band, the personnel of which is composed of patients, and which frequently participates in parades which are held in Franklin. From time to time plays and various entertainments are provided by the patients and produced in the auditorium of the institution and are excellent in character. Nothing is overlooked or neglected that may contribute to the physical well-being, or provide happiness for the unfortunate patients for whom this institution is home.

The visitor is always impressed by the remarkable cleanliness and perfect order that is maintained throughout the entire institution. The author a few years ago had the privilege of taking a retired United States army officer, who had seen service in three wars, and has been recognized as one of the outstanding military men of his time, through the institution and he remarked that never before had he witnessed such perfect discipline and management.

A fact that will demonstrate the efficient management of the institution is disclosed by statistics which indicate that, although conducted at the highest cost per patient for food, it has also been conducted at the lowest entire cost per patient of any similar institution in the country.

The Warren State Hospital—The Warren State Hospital, located at North Warren, Warren County, is an institution for the care and treatment of mental and nervous patients. This hospital

was opened for service October 5, 1880; the original buildings are of stone construction and later ones of brick.

The many fine buildings and beautifully landscaped grounds present a very attractive appearance to the visitor, and provide an environment which is beneficial to many of the patients.

The property comprises 1,326 acres of land, of which 219 acres, designated as the Farm Colony, are devoted to agriculture. The capital investment amounts to approximately \$7,000,000.

The yield of farm products (two-year period) includes the following: potatoes, 15,745 bushels; vegetables, 600 tons; milk, 1,308 tons; beef, 40,763 pounds; veal, 16,890 pounds; eggs, 27,510 dozen; poultry, 15,663 pounds; pork, 123,885 pounds. A census of farm stock shows the following: poultry, 2,797; horses, 19; cows, 119; yearlings, 60; calves, 38; bulls, 5; pigs, 214; hogs, 276.

At the time of this writing the patient population is 2,671 and the personnel 493. A fine new building has recently been opened for women patients, designated as the Mitchell Building in honor of Dr. H. W. Mitchell, who, until his death a few years ago, had been superintendent of the hospital for many years. In 1930 there was opened a building designated as Stone Hall in honor of the late Rufus Barrett Stone, who had rendered valuable service as a trustee for many years.

Stone Hall, in addition to housing both women and men patients, with beautiful and well-appointed recreational rooms for each sex, also contains the X-ray room, with the most modern shockproof X-ray machine, laboratory, medical library, surgical operating room, and occupational therapy rooms for both men and women.

With excellent medical, nursing and attendant personnel, and every facility known to modern science for the treatment and care of the mentally ill, this institution has a most enviable record of achievement in this field of medical science.

Of course, there are patients there who will be patients for life, but a very great number have been and are being completely rehabilitated and returned to their homes capable of meeting the problems of life and making valuable contributions to society. All patients are treated with the greatest sympathetic understanding and every known scientific test and examination is resorted to in order to arrive at a correct diagnosis and administer the proper treatment. Occupational therapy is used very extensively and with surprisingly good results. With the large number of patients, and patients of all types to be cared for, there is not a strait-jacket or any other similar instrument of restraint in the entire hospital.

It has been the privilege of the author to take, or advise to be taken, a large number of mentally ill patients to this institution and see them returned to their homes rehabilitated.

The institution has accomplished much in breaking down the unfortunate attitude of many people toward the mentally ill and the many erroneous ideas that have prevailed concerning mental hospitals, and in indicating the sensible and humanitarian approach to these subjects. It has been rendering a most valuable service to society, as has also the Polk State School, and each institution reflects great credit to the Commonwealth of Pennsylvania.

In the northeast section of the city of Erie, on historic ground, where in 1794 the body of the hero of the "Battle of the Fallen Timbers," General Anthony Wayne, who died at Fort Presque Isle on December fifteenth of that year, was buried, and near the site of the shipyard where Perry, the hero of "The Battle of Lake Erie," built his early war vessels, is located the Pennsylvania Soldiers and Sailors Home.

While Hon. Morrow B. Lowry was a member of the State Senate, he conceived the idea of a Marine Hospital at Erie, for the care of sick and unfortunate seamen of the lake service. Through his efforts appropriations were made from year to year, until a building was erected which constitutes in the main the central portion of the present Soldiers and Sailors Home.

The structure was never used for the purpose of the original appropriation, and was neglected for some years until it became badly out of repair.

On June 3, 1885, a bill was introduced in the Legislature by Hon. Isaac B. Brown, of Corry, passed and approved by the Governor, creating a commission to locate a home "for disabled soldiers and sailors of Pennsylvania." This body, consisting of Governor Pattison and ten other prominent citizens, concluded to make use of the Marine Hospital for the purpose. An appropriation was secured, trustees appointed, additions made to the original structure, and within less than a year from the day of the first legislation on the subject, the institution was ready for occupancy. The two most active men in working up the enterprise were Major John W. Walker and Captain John H. Welsh, both of Erie.

The home was dedicated on February 22, 1887, at which time it was formally opened for residents. General Gobin, of Lebanon, delivered the dedicatory address, and speeches were made by Governor Pattison and others. Major W. W. Tyson was appointed commander.

The buildings have been much enlarged and improved and the grounds, which embrace 107 acres, are kept up in an excellent manner.

The institution is a great credit to the State and makes a most comfortable abiding place for the aged and unfortunate soldiers and sailors who become residents. Any Pennsylvania soldiers or sailors who are disabled and without proper means of support are received.

Approximately eleven thousand residents have found a comfortable and pleasant home in this worthy institution and, in the cemetery on the home property, which is well cared for, are the last resting places of 850 former residents.

On the grounds of the home is a blockhouse in imitation of the one in which General Anthony Wayne died, which stands on or very near the place of his burial. It contains portions of his coffin and various mementos of the Revolutionary hero. The main men in locating General Wayne's grave and securing the erection of the blockhouse were Dr. Edward W. Germer and Captain John H. Welsh.

At Edinboro, in Erie County; at Clarion, in Clarion County; and at Slippery Rock, in the adjoining county of Butler, are located excellent State Teachers Colleges. All have fine buildings, beautifully landscaped grounds, and capable personnel. Each of these educational institutions have excellent records of achievement in their field of education.

PENNSYLVANIA STATE PARKS IN THE REGION

Presque Isle State Park at Erie is under the direct management of the Erie State Park and Harbor Commission, a unit of the Department of Forests and Waters, and has an historic background. The triangle in which Presque Isle is located was originally claimed by no less than four states. Largely through the persistence of Benjamin Franklin, the triangle was sold to Pennsylvania for \$157,000. Subsequent claims by the Indians were settled by the payment of \$32,000.

The park comprises three thousand two hundred acres and has been developed as a recreational area. Improved highways, trails for nature study, hiking, horseback riding and other improvements, together with bathing facilities, have been provided, until today it is one of the outstanding recreational areas in northwestern Pennsylvania. Excellent opportunities are afforded for sailboating, surf bathing, surf fishing and picnicking.

In addition to the recreational features provided, this park offers unlimited opportunity for study of Pennsylvania flora and fauna and

is visited by students for special study from universities and colleges throughout the eastern United States. There are ample provisions for parking, but no camp sites are provided. There are no entrance fees or parking charges.

Within the park is a fine monument erected in honor of Commodore Perry. Also there may be viewed the ninety-eight-year-old U. S. S. "Wolverine," first metal ship of the Nation's navy. Originally the U. S. S. "Michigan," the "Wolverine" was turned over to Erie in 1927, but two years ago it was closed to visitors. Since then it has been disintegrating at a mooring in Misery Bay. Even the name has been lifted, to be given the former Great Lakes luxury liner "Seeanbee," taken over by the navy.

The War Production Board some time ago asked that the ship be scrapped and Captain W. L. Morrison, United States Navy, retired, last commanding officer, told the Erie Council he thought it should be turned into "guns and tanks to fight to-day's enemies." However, historically-minded persons are still making efforts to find a way to preserve the vessel for its historic value.

Not far from the present resting place of the "Wolverine" may be seen another historic vessel, Perry's flagship, the "Niagara."

An idea of the popularity of this recreational center may be acquired from the fact that in the month of June, 1940, 66,300 cars, carrying 268,500 visitors, entered the Presque Isle Park, as reported by Superintendent Millard L. Davis.

One-half mile east of Sizerville, Cameron County, on Route 155, is located the Sizerville State Forest Park. The park area embraces 150.5 acres, of which one hundred acres have been developed, with adequate camping and picnic facilities provided. Buildings include a bath-house, concession stand, four latrines, fifteen shelters. Thirty-one fireplaces and six drinking fountains, as well as two springs covered with shelter; twenty tenting areas with tent platforms and twenty fireplaces; parking area for 162 cars, and seventy tables and benches have been provided. An outdoor swimming pool, 57 feet by 109 feet, lighted by electricity, was a gift of the Olkosky-Jessop Post of the American Legion. The number of visitors to this recreational center during the year approximates ten thousand.

The Cook Forest State Park, located in Clarion and Jefferson counties, contains 6,055 acres and contains one of the few remaining tracts of the State's virgin timber. This park offers miles of picturesque hiking and riding trails, rustic cabins and picnic areas. Many thousands of visitors are attracted to this area each year and

derive great pleasure and inspiration from a sojourn there among the majestic trees and the natural scenic splendor unsurpassed by that anywhere in the Nation.

Near Clearfield, Clearfield County, is located the Department of Forests and Waters Nursery of nearly thirty million trees.

Clear Creek Camp is located in northern Jefferson County along Clear Creek and the Clarion River. It comprises thirteen thousand acres within the area of which there have been provided a swimming pool, ball park, between twenty and thirty cabins, a store, forest officers' and superintendent's offices. A great deal of the work in the development of this very attractive recreational center was done by CCC boys during the years 1933 and 1934. The natural beauty of the area and the recreational opportunities afforded attract a great many visitors as picnickers and campers each year.

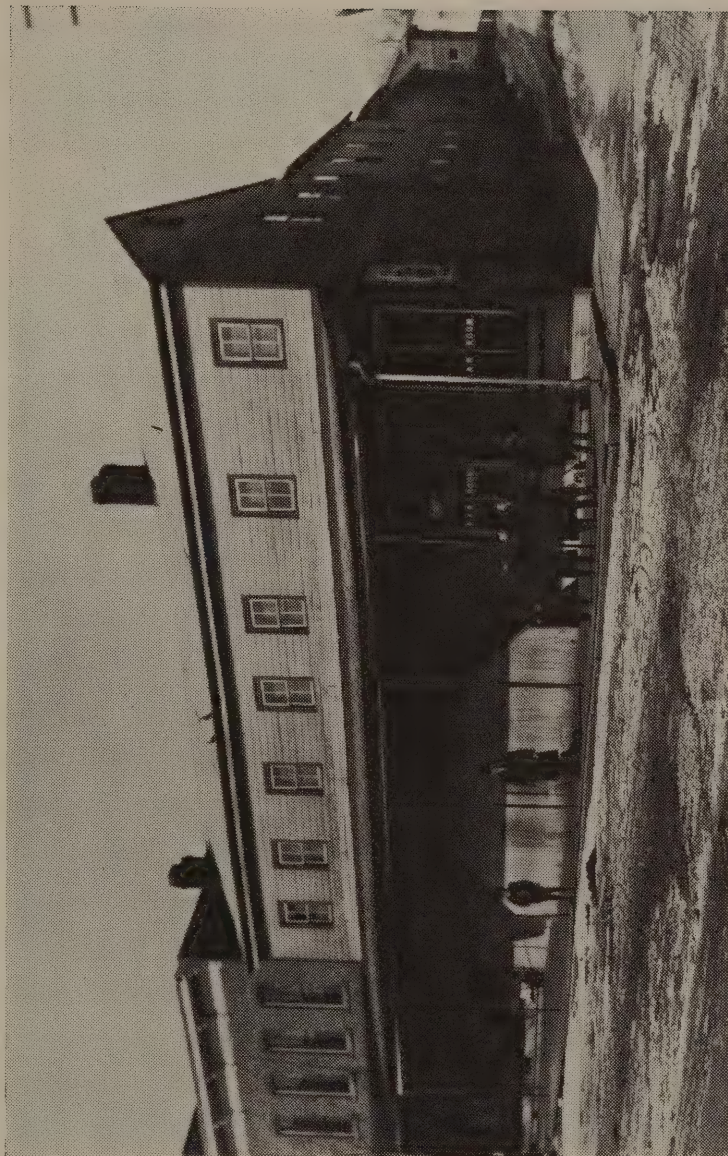
The Allegheny National Forest extends into four counties of the region. The Forest Service is a bureau of the United States Department of Agriculture. Besides administering the national forests, the Forest Service coöperates with State conservation departments and private forestry interests and conducts investigations to determine the most desirable management of forest lands and the uses for which the various products of the forest are best adapted.

National forests are, for the most part, located in mountainous regions where wise use of tree growth is of great importance in conserving water supplies and in preventing or retarding soil erosion and rapid runoff of precipitation. They occupy soils not suited to farming.

The timber, water, grazing, recreational, wildlife, and other resources of national forests are for the use of the people. National forests contribute to industrial enterprises through their yearly cut of over a billion board feet of timber; they protect watersheds and help to insure pure and abundant water supplies to hundreds of towns and cities; furnish pasturage for about thirteen million head of live stock; and afford playgrounds for millions of recreation seekers.

It was through the efforts of the Pennsylvania Forestry Association and other organizations and individuals interested in conservation that Allegheny National Forest came into being in 1922.

Upon invitation of the Commonwealth of Pennsylvania to establish a Federal forest within the State, as provided under the terms of the Weeks Law, and thereby join forces with it in the recognized task of forest conservation, it was necessary to find a locality which offered an opportunity to acquire, at reasonable price, a large and



(Courtesy of "Jeffersonian Democrat," Brookville)

Old Jefferson Hotel, Built 1828, Columbia Theatre Now on Same Site, Brookville

well consolidated area of forest land. A careful study was made by bureaus and commissions representing the Federal and State governments.

Dr. Rothrock, the father of Pennsylvania forestry, on the occasion of his address to the people of Northwestern Pennsylvania in 1922, said in part:

"It is to halt the growing impoverishment, to restore fertility to the soil, to maintain water in your noble river, to furnish Pittsburgh with water fit to drink, to maintain commerce on the Ohio River, to open outing grounds in healthful, timber-producing forests, that the Federal Government comes in and says, 'Go on with your mines and your oil wells, prosecute every lawful industry, cultivate your forests, and without halting or impeding you, we will bring back the timber on lands that can produce no better crops.' Its very beneficence dazzles us, and starts the question, 'Can it be done?' It has been done by governments less wealthy or able than our own, but it was only after men learned that it must be done to save the country. It was also learned that the longer it was delayed, the more it would cost."

Parts of four northwestern Pennsylvania counties were finally selected as the most desirable location for a national forest. These are southeastern Warren, western McKean, western Elk, and all but the western end of Forest County, a gross area of seven hundred and twenty-six thousand acres. The boundary of the forest may be briefly described as follows: The Allegheny River on the west, the Clarion River on the south, a line from Ridgway and Kane to Bradford on the east, and New York State on the north. To date, almost four hundred and sixty-three thousand acres have been acquired. Purchase of additional acreage will continue as funds are made available by Congress.

Administration of national forests and the conduct of most matters related to forestry have been charged by Congress to the Secretary of Agriculture. The secretary has delegated these duties to the chief of the Forest Service.

The policy under which national forests are administered by the Department of Agriculture through the Forest Service was laid down in 1905 by Secretary of Agriculture James Wilson in a letter to Chief Forester Gifford Pinchot, in which he said:

"In the administration of the forest reserves (now national forests), it must be clearly borne in mind that all land is to be devoted to its most productive use for the permanent good of the whole people and not for the temporary benefit of individuals or companies. All the resources of the national forests are for use, and this must be brought about in a thoroughly prompt and business like manner, under such restrictions only as will insure the permanence of these resources. . . . The continued prosperity of the agricultural, lumbering, mining, and livestock interests is directly dependent upon a permanent and accessible supply of water, wood, and forage, as well as upon the present and future use of these resources under business like regulations enforced with promptness, effectiveness, and common sense where conflicting interests must be reconciled, the question will always be decided on the standpoint of *the greatest good of the greatest number in the long run.*"

In order to prevent delays in the transaction of business in the administration of the national forest, the United States has been divided into ten national forest regions with a regional forester in charge of each.

Allegheny National Forest is one of seven national forests in the Eastern Region. The others are: White Mountain National Forest, New Hampshire and Maine; Green Mountain National Forest, Vermont; Monongahela National Forest, West Virginia; Cumberland National Forest, Kentucky; George Washington National Forest, Virginia; and the Jefferson National Forest in Virginia. The headquarters of the Regional Forester is in Philadelphia.

The Allegheny National Forest is divided into two Ranger Districts. The Northern Ranger District includes 393,079 acres in parts of Warren and McKean counties, with headquarters at Sheffield. The Southern Ranger District includes 333,261 acres in parts of Forest and Elk counties, with headquarters at Marienville.

Supervising the District Forest Rangers in their work is the Forest Supervisor, who is assisted by a staff which includes an Assistant Supervisor and specialists in the management of forest resources.

On March 21, 1933, President Roosevelt asked Congress for legislation to help relieve distress, rebuild men, and to accomplish constructive conservation work in our vast federal, State and private forest and park properties. Congress enacted that legislation, and

on April fifth, the President appointed a Director of Emergency Conservation Work. Shortly afterward the second CCC camp in the United States was established in Allegheny National Forest near Duhring in Forest County.

The program was two-fold: restoring confidence and rebuilding manhood, and accomplishing these objectives through worth while conservation work. The most pressing and productive work is that which will help to protect, develop, and improve existing forests, prevent soil erosion and flood damage, and reestablish forest growth.

On each of the two Ranger Districts, Civilian Conservation Corps camps engaged in many worthwhile conservation projects such as construction and maintenance of bridges, buildings, dams, roads, trails, telephone lines, and recreational areas, reforestation, fire suppression, fire hazard reduction, stream improvement, fish stocking, timber stand improvement, insect and disease control, and timber estimating.

Fire is an ever-present danger and the worst enemy of the forest. Among the chief causes of fire are: smokers, railroads, lumbering operations, campers, and brush burners. A small fire may spread into a conflagration, and campfires, matches, and burning tobacco should be used as carefully in the forests as they are at home. Carelessness and disrespect may lead to the loss of lives, homes, game, fish, and vast amounts of timber. Fire-fighting has priority over everything in the administration of Allegheny National Forest, and when a fire breaks out, all other business is temporarily halted, if necessary, to speed the dispatch of crews and equipment.

Five Pennsylvania Department of Forests and Waters lookout towers and five United States Forest Service lookout towers comprise the primary detection system for Allegheny National Forest. Close coöperation is maintained between State and Federal organizations. Using cross readings from instruments in the fire towers, applied to maps in a central dispatcher's office, forest officers are able to ascertain the exact location of any fire within the boundary, seconds after word of the fire is received.

Snap fire crews, on 24-hour duty at every CCC camp during the spring and fall fire seasons, were ready to leave for a fire within not more than five minutes after the alarm was sounded; the network of forest roads constructed in recent years enables trucks to carry men to the scene of a fire within a short time.

Through skillful use of the modern technique in combating forest fires, losses have been held down to a low figure. During the past

ten years, only 6/10 of 1% of the area has been burned over, or less than one-half acre annually for each one thousand protected.

In many cases where repeated burnings followed early lumbering, it has been necessary to plant seedling trees in order to get a new crop of timber started. Over eleven thousand acres of denuded land in the forest have been successfully planted. It is estimated that thirty thousand acres still remain to be planted before the entire forest can be classified as growing a satisfactory timber crop.

This cause has been greatly furthered by the coöperation of the Society of the Daughters of the American Revolution. Their memorial planting near Tidioute contains more than ten thousand small pines. It is dedicated as the Penny Pine Project, 1940.

The two-acre memorial plantation of the Federated Women's Clubs of Pennsylvania, which commemorates the two hundredth birthday anniversary of George Washington, is becoming a very impressive sight. It is located on the Hearts Content Recreational Area.

Research is continually carried on to determine the best means of growing and the most desirable and economical methods of harvesting crops for timber.

Experimental forests are selected to represent each of the major forest types. The Kane Experimental Forest is located in Allegheny National Forest. It is typical of the forested land on the Allegheny Plateau. Investigations are under the direction of the Allegheny Forest Experiment Station, with headquarters in Philadelphia. These cover a wide range of subjects, including the growth, management, and protection of the forests, the influence of forest cover on streamflow, floods and erosion, and the effective utilization of forest products.

The Forest Service has designated a four thousand three hundred-acre tract of virgin hemlock forest on the east branch of Tionesta Creek, near Sheffield, as the "Tionesta Natural and Scenic Area." This area illustrates virgin conditions of forest growth. It is to be retained in a virgin or unmodified condition for purposes of science, research, historical interest, and education. Within this area no commercial use is allowed, and public use is carefully regulated.

The aims of the Allegheny National Forest in the management of its timber resources are: first, to keep the land fully stocked with thrifty trees of desirable species; second, to obtain a steady and continuous yield of useful wood products from each unit of the for-

est; third, to grow the largest and best crop possible and thereby meet the needs of permanent wood-using industries with a never ending source of raw material, and fourth, to harvest the timber crop as it matures or ripens and to secure the closest practical use of the trees cut.

Harvesting of the forest's timber crop is planned in such a way that the amount of timber taken out each year does not exceed that which was grown during the same period. In this manner, a sustained yield of forest products is assured.

Forest officers have made a careful survey of timber resources and prepared a plan of management prescribing the areas and amounts of timber to be cut each year and the methods and order of cutting. These long range plans are made in order to insure a constant and permanent supply of timber for the communities and industries depending upon the forest for raw materials.

When it has been determined that the timber on a certain area is matured or ripe for cutting, the trees to be cut are marked by a forest officer, the object being to leave enough of the more thrifty trees to keep the area well stocked and thus insure a second crop of timber from the same area in twenty to twenty-five years.

Timber is not cut to such an extent as to impair the protective cover of the forest, particularly its value in regulating stream flow, nor is mature timber taken from recreational areas where it has a higher use for scenic purposes. Special care is taken to protect stream banks. Cutting is restricted for one hundred feet or more along fishable streams.

Timber from the Allegheny National Forest is used in the furniture industry, in the manufacture of paper, wood distillation products such as charcoal and acetic acid, shoe lasts, bowling pins, brush handles, tool handles, and many other products.

At Johnsonburg, on the eastern side of the forest, the Castanea Paper Company utilizes aspen, yellow poplar, cucumber, maple, beech, and other species in the manufacture of paper for the "Saturday Evening Post," the "Ladies' Home Journal," and other publications. Hardwood distillation plants located at Mayburg, Morrison, Sergeant, Westline and Hallton utilize the native trees in manufacturing charcoal, acetates, and wood alcohol.

There are a number of local sawmills and numerous small plants engaged in the manufacture of turned articles from native white ash, hard maple, ironwood, and other trees.

At present the authorized amount of timber to be removed from the forest each year is sixteen million board feet. The harvesting of this amount of timber furnishes employment for approximately 250 men throughout the year. As the amount of timber ripening each year increases, the amount to be removed from the forest will be increased and more employment provided.

The Federal Government does not pay State or local taxes on forest land. In lieu of such taxes, 25% of the total receipts of the national forest are turned over each year to the State to be apportioned for road and school purposes in the counties in which the national forest is located. An additional 10% is made available for road building in the national forest, so that 35% of the receipts return directly to the benefit of local national forest communities. In addition, the Commonwealth reimburses the counties in which the national forest is located at the rate of 5¢ per acre in lieu of taxes for the benefit of schools and roads until such time as this amount is equalled or exceeded by the money received from national forest receipts.

To make the forest fully useful to the public and also to facilitate its administration and protection as public property, it is necessary that it be equipped with various classes of improvements. Some of these are primarily for official use as, for example, fire lookout stations, ranger stations, and telephone lines. Other improvements are purely for the benefit of various forms of public use as, for example, the recreational areas. Still others, such as roads and trails, are developed both to facilitate the task of administering and protecting the forest and to promote use by, and serve the interests of, the public generally.

RECREATION

The Allegheny National Forest area has many uses besides the production of wood, important as that is. The management of these lands for a timber crop promotes their recreational values. Intensive fire protection and tree planting is gradually clothing the entire area with a splendid stand of young trees. Streams are beginning to respond to the beneficial influence of shade and better watershed conditions. The by-roads are taking on the atmosphere of a forest setting. Bear and deer hunting within its confines attract thousands. The increasing popularity of this forest for the fisherman, the hunter, the camper, or the sightseer is a direct outgrowth of the Forest Service program of development.

VIRGIN TIMBER AREAS PRESERVED

Hearts Content Natural Area near Warren is one of the few remaining places in the East where one may walk beneath an unspoiled canopy of ancient pines and hemlocks. As the surrounding forest succumbed to the ring of the axe, the leaders of the Wheeler & Dusenbury Lumber Company, former owners of this land, offered twenty acres of untouched forest to the Forest Service in order that the public might come to marvel at this remnant of early Penn's Woods. Matched by a gift of land from the Federated Women's Clubs of Pennsylvania and by a hundred acre purchase by the Federal Government, Hearts Content became a permanent heritage of all the people. Under Forest Service management, it is dedicated for all time to remain in all its inspirational beauty untouched by axe or saw.

Tionesta Natural and Scenic Area near the center of Allegheny National Forest where the four counties join, is the site of a large tract of virgin hemlock and hardwood timber. Purchased by the Forest Service from the Central Pennsylvania Lumber Company as its great Sheffield mill approached the end of its run, this stand was dedicated to public use and to intensive scientific study. Two thousand one hundred and thirteen acres of this tract have been carefully surveyed and data are collected annually by the Allegheny Forest Experiment Station in order to add to our knowledge of forest ecology. The remaining 1967 acres or northern half are for public use and enjoyment, and can best be reached from a forest road running south from Ludlow.

THE GRAND CANYON OF PENNSYLVANIA

One of the most beautiful scenic spots in America is the Grand Canyon of Pennsylvania, one thousand feet deep and fifty miles long, situated near Wellsboro.

It has taken its place as one of nature's wonderlands with a glorious expanse of over ninety thousand acres of forest land, and is visited by thousands of tourists and residents of northwestern Pennsylvania, seeking diversion for a day, or a few days amid the beauties of nature.

It is a "Land of Endless Mountains," crossed by gorges and ravines, laced with sparkling mountain streams, studded with shining waterfalls. Wild life is abundant and it is seldom that the visitor misses a glimpse of deer or other creatures native to the section.

Through the midst of this territory wanders Pine Creek, known as "Tiadaghton" or River of Pines by the Indians. This stream has

formed a majestic gorge known as Pennsylvania's Grand Canyon. At several points on its rim the State of Pennsylvania has set aside areas for park purposes from which the visitor may enjoy entrancing scenic vistas of the canyon and the verdure clad mountains. These views are always beautiful regardless of the season and visitors are amply rewarded by returning from time to time and enjoying the country in its various colors and moods.

There are many interesting places in the canyon country. After first having seen the canyon from Leonard Harrison State Forest Park, the visitor may drive to Ansonia which is twelve miles west of Wellsboro on Route 6, and take the West Rim Road to Colton Point Park, which is directly across the canyon from Harrison Park. Several view points, picnic facilities, and fascinating hiking trails make this park well worth a visit. The West Rim Road also continues along the canyon to Bradley Wales Park, which overlooks the little village of Tiadaghton nestling at the bottom of the canyon. This is a picnic park, not yet fully developed.

The many forest roads branching from the West Rim Road wind over the mountains and through many lovely little valleys and glens. Many days can be spent on these "Switchback Drives," as they are called, and the visitor will find in them an outstanding experience.

One of the most popular points in the canyon country is Leonard Harrison State Forest Park. This scenic point lies directly on the canyon's rim and is the only canyon viewpoint that can be reached by all paved roads. State Route 660 leads from Wellsboro to the park.

Here are to be found an extensive parking area, picnic tables, fireplaces, shelters, etc., and here are the most spectacular views of the canyon. Interesting and beautiful walks and trails lead to look-out points, waterfalls and glens.

One of the most interesting trails in Harrison Park leads down the mountain in switchback fashion to the glen of Little Four Mile Run, a typical mountain stream. In the glen are several very beautiful waterfalls which can be viewed from the "Turkey Path," as the trail is called. On even the hottest days it is cool and shady along the trail which continues along the woodsy stream to Pine Creek itself. The hike down and back, while not advised for elderly people, is well worth the hour or so necessary.

Hundreds of people daily view Pennsylvania's Grand Canyon from the "Look-out" at Harrison State Forest Park. From a thousand feet above the winding stream of Pine Creek, the view of several miles of the canyon will long be remembered.

RECREATIONAL AREAS

For those who have time for more than the pleasant auto trip through the forest, there are many delightful spots for picnics and overnight camping. Cabins and other tourist facilities are provided by the residents of the several small towns that lie in or adjacent to the national forest. Allegheny National Forest differs from Federal and State parks in this respect as its recreational developments do not include cabins for rent nor concessions of any kind.

Twin Lakes Recreation Area is by far the most popular of the recreational areas. A seven-acre artificial lake provides good swimming and a beautiful setting for its spacious picnic grounds. A bathhouse, storm shelters, and all necessary conveniences are provided. Its week-end visitors may number as many as eight thousand in mid-summer, with sixty thousand to seventy thousand for the season. A camping area capable of meeting the needs of twenty-three groups is also provided nearby. Campers and picnickers are furnished wood in pole lengths and provide their own axes with which to cut it up.

Loleta Recreation Area is an attractive spot which occupies the site of the old sawmill town of Loleta, which had a population of several hundred before the turn of the century. It is located six miles south of Marienville on Millstone Creek. Supervised swimming is one of the chief attractions. Facilities are also provided for camping and picnicking. It is a favorite area for church picnics and reunions.

Hearts Content Camping-Picnicking Area is directly adjacent to the Hearts Content Natural Area, making it one of the most popular picnic spots in the forest. It is approximately fourteen miles south of Warren and is high on the headwaters of Tionesta Creek. Besides the virgin timber tract of 120 acres, there is the 80-foot fire tower in the area. Many square miles of the forest can be viewed from this point. During fire weather when the tower is occupied, the lookout man will gladly explain how fires are handled and point out things of special interest to visitors.

Sandstone Springs Picnicking Area is only a few miles from Hearts Content and approximately eleven miles south of Warren. It is located in a grove of tall white pines on State Highway 337. As its name implies, there is excellent water to be had and the usual facilities, including fire grates, storm shelter, tables, toilets, and free wood. It is a favorite spot for the local people.

Kelly Pines Camping-Picnicking Area is located in a beautiful grove of white pines on the bank of Wolf Run, a tributary to Spring

Creek, between Duhring and Marienville. One of the smaller areas, besides its beauty, the chief attraction of this area is the peace and quiet it offers.

Kennedy Spring Picnicking Area is the newest of the eight developed areas. Located on U. S. Highway 219 between Bradford and Kane, it meets a public demand for another pleasant place to take a picnic lunch or supper. Heavily wooded, its cool shade and sparkling water are sure to please the forest visitor.

Allegheny Picnicking-Camping Area, located along the Allegheny River on Route 59 above Warren, is a shady site. At the foot of a steep mountain in a sixty-year-old stand of mixed hardwoods, affording a pleasant retreat from the summer heat, will be found tables, fireplaces, and similar conveniences as elsewhere.

Morrison Run Picnicking Area is one of the oldest developments near Warren. It is chiefly for local use and not recommended for the general public as space is limited and the use heavy.

Areas have been developed where individuals may obtain permission to build and maintain summer homes or hunting cabins. One of these is the Hoffman Farm Summer Home Area and is located on a forest road south from Ludlow. It is high on the ridge overlooking the canyon of the east branch of Tionesta Creek.

CAMP CORNPLANTER

About twelve miles northwest of Kane is a large organization camp known as Camp Cornplanter. It is leased to the State Young Men's Christian Association and provides a wholesome setting for outdoor recreation. Its eight dormitories provide ample room for ninety-six in addition to the camp director and his staff. Swimming, tennis, soft ball, hiking, and craft work are the chief diversions. The presence of this camp in the national forest provides many less privileged youngsters the opportunity to enjoy a low cost vacation that is hard to equal at any price.

OTHER CAMPS

The Girl Scout organization of Warren County occupies one of the former work camps under permit from the Forest Service and a similar camp in Forest County is occupied by the Pennsylvania State College Summer School for forestry students. These uses add considerably to the value of the forest's multiple land use program. More than three hundred distinct uses and rights-of-way have been

issued by Allegheny National Forest to date to cover the need for private occupation of public land.

DEVELOPMENT OF FISH AND GAME RESOURCES IN THE FOREST

Wildlife adds materially to the enjoyment of the forest by the public. In coöperation with the State Game Commission and the State Fish Commission, hunting and fishing within the forest are being constantly improved. The State hunting and fishing laws are in effect on all lands within the national forest.



(Courtesy of "Jeffersonian Democrat," Brookville)

Pinecrest Country Club, Serving Brookville and Clarion

Today many excellent pools and shelters, of streams formerly characterized by sluggish and shallow water, have been created by dams and deflectors constructed under the supervision of the Forest Service. A stocking program is under way whereby fingerling trout are placed in the small feeder streams which form the headwaters of major trout streams. Fingerlings are secured from the Farnsworth Trout Rearing Station recently constructed in the forest by the Forest Service. It is operated by the Fish and Wild Life Service through coöperation between the United States Department of Agriculture and the United States Department of the Interior. As a result of this program of stocking and stream improvement, together with the planting of legal size trout during the spring months by the Pennsyl-

vania Fish Commission, trout fishing on the principal forest streams has shown considerable improvement.

It is estimated that over 250 black bears and more than 10,000 deer make up the big game population of the forest. In addition there are many thousands of small game animals such as rabbits, squirrels, raccoons, and opossums. Game birds and fur-bearers make this an imposing list.

Wildlife is a remarkable resource produced by and because of forest lands and water. Its presence in numbers and kinds compatible with available food supplies is an integral part of a well-balanced forest relationship. Its harvest by means of hunting, trapping, or fishing as a means of desirable control of numbers or distribution, provides sport, fur, and meat as a part of the social and economic service this forest may render to mankind.

There are many other recreational areas throughout northwestern Pennsylvania in addition to those already mentioned.

Conneaut Lake, the largest natural lake in the State, situated about twelve miles from Meadville, surrounded by hotels, inns, and camps, and with all sorts of entertainment features and devices, attracts thousands of visitors every summer, and has long been a very popular resort. A large fine auditorium has been the scene of excellent classical musical festivals and various entertainments, and numerous conventions from time to time. The lake provides good fishing and many large muskellunge have been taken from its waters.

There are good swimming and picnicking at Clear Lake, near Spartansburg, and Canadohta Lake, between Union City and Titusville, a few miles east of Cambridge Springs, on U. S. Route 6. Canadohta Lake is nearly two miles long and 1,477 feet above sea level. Species of fish found there include bass, pickerel, catfish, pike and perch.

A few miles north of Warren is located the Cornplanter Indian Grant, which is of great interest to tourists. The inhabitants are beginning to renew the old arts and crafts of their people.

Kane, situated on a high plateau at the junction of U. S. Routes 6 and 219, has special laws forbidding the growth of certain flowers and weeds annoying to hay-fever and asthma victims, and hundreds of persons so afflicted seek relief there. In the winter season great throngs of people go there to participate in winter sports, such as skiing, skating, etc.

Rocky Basin Park, Camp Perry, Grove City Community Park, in Mercer County; Polk Playground at Polk, Venango County;

Hasson Park at Oil City and Waltonian Park, in a most beautiful setting between Oil City and Franklin, and Stoneboro Lake at Stoneboro, Mercer County, all are very popular resorts for those seeking a place to swim or enjoy other outdoor sports, and for picnicking.

There are a number of well located Boy Scout camps in the region which provide not alone recreation, but also nature study and programs which build character, and these camps are well patronized.

A large number of country clubs, beautifully situated and well equipped furnish recreation for their members. The region abounds in golf courses, both public and private, some of which are rated among the finest in the country.

The State Department of Commerce reports a growing popularity of northwestern Pennsylvania among tourists, and the natural scenic splendor of the region is unsurpassed anywhere in the country. In fact numerous world travelers have stated that it excels anything they have viewed in any other part of the world.

When in bloom, thousands of people visit the region to view the laurel and rhododendron displays along the mountain roads. In the autumn, the visitors who travel from distant points to view the gorgeous colorings of the forest trees are so numerous that very frequently in Franklin and some of the other cities, especially on week-end periods, it has been impossible for the public eating places to accommodate all of them, and the highways have been congested with cars. The Allegheny and French Creek valleys have for years attracted many artists who come to reproduce on canvas the beautiful views which abound in the region, and frequently national magazines reproduce some of these views, referring to them as among the most beautiful in the nation. Visitors have referred to the region as "The Garden Spot of the World."

The people of northwestern Pennsylvania have always been intensely interested in sports, hunting, fishing, baseball, football, basketball, bowling, and in fact all sports and many of those engaging in various sports have achieved national recognition. Half a century ago, horse racing was very popular and large crowds of persons interested in that sport attended the frequent racing meets held throughout the region, while horses with outstanding records were taken to distant places to participate in races.

The interest in baseball and football has been especially keen and great rivalry exists among the different cities in these sports, as well as in basketball.

This spirit of rivalry has been particularly intense between Oil City and Franklin. For some years these two cities maintained ball

clubs the players of which were nationally known and recognized as among the most capable in the country. The cost of maintaining clubs of this character was very great, but the funds were forthcoming when needed. Frequently when a crucial game was scheduled to be played between the teams of the two cities, a meeting of the supporters of one of the teams would be held, following which a scout was sent out with several thousand dollars, with instructions to come back with some outstanding player who was deemed necessary to strengthen the team, and the scout usually was successful in his mission. The expensive teams are no longer maintained but the rivalry is still existent and the games between the teams of the two cities attract great throngs of spectators.

Among the nationally known baseball players who at various times played with the Franklin team were the eccentric "Rube" Waddell, whose first playing of professional baseball was with the Franklin club; Claude Ritchey, a native of Venango County; "Rhody" Wallace, Scott Perry, Ralph Seybold, "Shorty" Slagle, "Jock" Menifee, Joe Steen, Joe Harris, and others.

In 1903 Franklin won the world's champion football title with, perhaps, the outstanding football team of all time. This team played ten games in their regular season's schedule without their goal lines ever having been crossed.

The team then went to Madison Square Garden, New York City, and issued a challenge to the world. Two teams competed with them there and each was easily defeated, the Franklin team still having never been scored against. On December 15, 1903, Orange, New Jersey, was defeated by a score of 12 to 0, and on December seventeenth, Watertown, New York, was defeated by the same score.

The real guiding hand of the team was Jack Hayden, only five feet, eight inches in height and weighing 170 pounds. He was an apt quarterback. The right halfback was John A. Matthews, best known as "Teck" Matthews, a wonderful runner with the ball. He was an Indian, native of Texas and had been a student at Kiskiminetas and Washington and Jefferson colleges. Matthews, however, did not participate in the New York games. The men who played with the team in New York were Schrontz, Lang, Kirkhoff, Sweet, McFarland, Woods, Hayden, McChesney, Steinberg, Roller, Davidson and Wallace, the latter being captain. David Printz, a Franklin merchant, was manager of the team. The headquarters of the Franklin delegation and players was the Waldorf-Astoria Hotel. At that time Christian Brecht operated a brewery in Franklin, the product being known as

Monkey Run beer, recognized as an excellent beer. When Mr. Printz arranged for the Franklin headquarters, he insisted that the hotel provide Monkey Run beer and, though even for a short time, the Waldorf-Astoria did provide the Franklin product.

The team was entertained by the Chamber of Commerce and congratulated by Mayor Low, Richard Croker and leading newspaper men including William Hearst, Joseph Pulitzer, William M. Laffin, Whitelaw Reid, James Gordon Bennett and Robert Shannon, the latter formerly of Franklin. Of course, upon the return home, incidentally with considerable money, the Franklin people having eagerly covered all bets offered on the outcome of the game, they were accorded a most enthusiastic reception.

On February 5, 1943, a game of basketball was played at Sharon in which a \$15,000 ball was used, and the Farrell High School defeated its arch-rival, Sharon, it being Farrell's thirteenth consecutive victory. Before the opening whistle, a war bond rally was held with the ball being auctioned off. John Giroski, president of the Mercer County Federation of Fraternal Organizations, made the top offer of \$15,000.

Music—The appreciation and advancement of music in the region is remarkable. Every city, and many of the small towns as well, maintain active musical societies, and many cities have two or more of these organizations. In many of the cities, in addition to adult musical study, there are maintained junior and juvenile groups supervised by the adult societies and the progress of the youth in music is, in many instances, remarkable, native talent being developed in harmony with accepted good practice.

The interest in music within the schools of the region is very general, practically every city maintaining school bands, drum corps, and orchestras, while in State-wide contests the various musical units of the schools and individual members are awarded first prizes and high recognition.

The popular song of a few years ago, "The Music Goes 'Round and 'Round" was composed by a Franklin student, Harold Hodgson, and another Franklin student, Paul L. McKenzie, Jr., who conducted a popular orchestra at Franklin for some time, composed a song which has been adopted as the official song of the Chemical Warfare Service, United States Army. Each of these young men was a student in the Rocky Grove School, Sugarcreek Township, adjacent to the city of Franklin.

Fifty years ago Titusville was the home of a nationally known musical organization, Coleman's Orchestra. John Coleman was the director of this orchestra and his son, Joseph, cornetist, and Harry Kerr, flutist, were nationally known as outstanding artists with their respective instruments. Helen Jepson, the popular Metropolitan Opera star, is a native of Titusville.

For a period of five years ending in 1931, the region had an organization known as the Inter-City Symphony Orchestra. This musical organization was widely known and recognized for its outstanding merit and the artistic excellence of its concerts. The membership was made up principally of artists residing in the cities of Franklin, Oil City and Titusville, with additional artists at times from Meadville, Cambridge Springs and Pleasantville. Although not a musician himself, but realizing the great cultural value of high class music, the author was much interested in this organization and was preparing for the incorporation of it when circumstances difficult to overcome caused its abandonment. It is anticipated that this former very worthy and excellent musical organization will be revived and again make valuable contributions to the cultural life of the region.

For a great many years, the First Baptist Sunday School Orchestra, in Franklin, under the direction of George W. Feldman, gave numerous concerts of outstanding merit and the organization was widely known, as also was the choir of this church, the leading members of which were artists of outstanding musical ability.

Fraternal Societies—The fraternal life of the region is very active. All of the leading fraternal organizations are well represented throughout the district with large memberships.

All branches of the Masonic fraternity are represented in the various cities and, in the city of Erie, the Zem Zem Shriners Hospital for Crippled Children is engaged in a most meritorious humanitarian service in the rehabilitation of crippled children.

The Independent Order of Odd Fellows have a very large membership in the region and maintain two very commendable institutions. Their Home for the Aged is located at Grove City, Mercer County, and their Orphans Home at Meadville, Crawford County, a very commodious and modern institution, is said to be the oldest of its kind in the United States.

The Northwest Pennsylvania District of the Benevolent and Protective Order of Elks comprises seventeen lodges. All have large memberships, maintain fine lodge homes, and are most active in all

civic, patriotic and humanitarian activities. The district has been cited as the outstanding one in the entire order.

The Knights of Columbus also have a large membership in the region and are very active in supporting all worthy undertakings. Many of the councils maintain fine homes, those of Oil City and St. Marys being worthy of special mention.

The region has a considerable Italian-American population and a large number of lodges of the Sons of Italy make valuable contribu-



Moose Temple, St. Mary's

tions to public welfare. A few years ago, the author prevailed upon his friend, Judge Eugene Alesandronni, of Philadelphia, the head of the order in the State, to pay a visit to the region. He came to Oil City, where members of the order assembled from a dozen or more of the cities of northwestern Pennsylvania, and both a business and a public meeting were held, the latter attended by the business, professional and civic leaders of the various cities.

The Polish people of the region also have their societies and the Jewish people their lodges of the B'nai B'rith, making valuable civic contributions.

The service clubs, Rotary, Kiwanis and Lions, are all represented in the various cities, as well as the veterans organizations, American

Legion, Veterans of Foreign Wars and Spanish War Veterans, all active and all concerned intimately with the public welfare.

The Sons of the American Revolution and the Daughters of the American Revolution uphold the tradition of their worthy organizations.

The home offices of the Protected Home Circle are located in Sharon, Mercer County.

CHAPTER XVI

Religious Organization

There is much associated with the great State of Pennsylvania of which her citizens may be justly proud, and not the least of the many creditable things has been the attitude, from the very beginning and continued ever since, of the State toward religion and religious toleration.

The first settlement of the white man in Pennsylvania was made by the Swedes. The Colony of New Sweden was conceived by the great King of Sweden, Gustavus Adolphus who, as early as 1624, planned to establish on the shores of the Delaware a Swedish colony in which the laborer should enjoy the fruit of his toils and which should be an asylum for the persecuted of all Christendom.

At that time the Thirty Years' War was raging in Europe, and amid the terrors and devastation of that conflict, the great King dreamed his noble dream, and planned for its execution which, however, he was not destined to carry into effect, as he laid down his life on one of the battlefields in 1632.

His daughter, Christina, who succeeded to the Swedish throne carried out the plans of her illustrious father, and in the autumn of 1637 sent two ships, the "Kalmar Nyckel" and the "Fogel Grip," carrying Swedes and Finns to the western world. These ships arrived on the banks of the Delaware in the early part of April, 1638, and thus the Colony of New Sweden was founded on Pennsylvania soil before William Penn was born.

Here this colony made the first settlements in the Keystone State, and the able Swedish Governor, Johan Printz established the first permanent seat of government in Pennsylvania, erecting a state house that stood for one hundred and sixty years.

There was no slavery in the Colony of New Sweden. Hence it is not strange that at a later day there was issued in Pennsylvania the first protest against slavery on the American Continent, despite the fact that many Pennsylvanians appear to think that the agitation against slavery began in New England among the Puritans.



(Courtesy of the Erie Chamber of Commerce)

First Methodist Church, Erie

In the Colony of New Sweden was established the first Indian policy in Pennsylvania, a policy of treating the Indian like a human being instead of like a wild beast, a policy of purchasing land from the Indian, and not taking it from the aborigines by trickery, intimidation and force. This was the same Indian policy for which William Penn became renowned at a later date.

But the greatest contribution of the Colony of New Sweden was the establishment of the principle of religious liberty; full religious liberty, as it exists in the United States of America today, did not exist anywhere as early as 1638.

This precious principle was established on Pennsylvania soil by the early Swedes, in a place where it was not destroyed as it was in many other places in the early America, but enjoyed an uninterrupted growth from the time of its planting.

This principle flourished and, by the time William Penn was ten years old, there had been eleven expeditions from the homeland to New Sweden, and when he came sailing up the Delaware to found his province, he passed five Swedish Lutheran churches on the way—a God-fearing people with all the virtues of the Puritans without their bigotry and intolerance.

William Penn gave this principle of religious liberty, planted here before he was born, such a majestic impetus that Pennsylvania soon became an asylum for the persecuted of every sect and of every creed. Great waves of English, Irish, Scotch-Irish, German, French Huguenot and Welsh immigration broke upon the shores of the Delaware. Religious liberty was the magnet that drew these racial stocks with their different creeds to Pennsylvania, thanks to the Swedes and William Penn.

Pennsylvania was not the only place where the principle of religious liberty was planted in the early days of the Nation. There was a great deal of religious liberty in the colony of Rhode Island, founded by Roger Williams after he had denounced the theocratic form of government of the Puritans, after he had denounced their doctrine of the union of church and State and was thrown out because his ideas were in advance of theirs.

Fortunately, the principle of religious liberty was not destroyed in Rhode Island; it flourished there from the beginning. But Rhode Island was small and there was not a large migration from that colony carrying this principle into the rapidly developing country as there was from Pennsylvania.

There was considerable religious liberty in New Jersey, founded along liberal lines by English Quakers, but this principle met an unhappy fate at the hands of those of Puritan sentiments. There was a great deal of religious liberty in Maryland, founded by the great English Catholic, Lord Baltimore, but the same thing happened in Maryland that happened in New Jersey, at the hands of those of Puritan sentiments and the noble plan of Lord Baltimore was wrecked. Then, as time went on, the Established Church of England was set up in many of the colonies.

In order to realize how largely religious liberty in the United States came out of Pennsylvania, we call attention to the fact that at as late a date as the close of the Revolutionary War, there were only three of the thirteen states that did not abridge religious liberty to the extent of having a State church. One of these was little Rhode Island where the principle of religious liberty was planted at the beginning and was not strangled to death. A second was little Delaware; but keep in mind that little Delaware, up until the Revolutionary War, was part of Pennsylvania. The third was the great State of Pennsylvania.

Keep in mind, also, that at as late a date as the time of the adoption of the Constitution of the United States, there were still five of the thirteen states that abridged religious liberty to the extent of having a State church.

The able historian, C. Hale Sipe, on this subject says:

"This principle of religious liberty, planted in Pennsylvania by the Swedes and given a majestic impetus by William Penn, was working all the time; and so it was not long after the adoption of the Constitution of the United States until all of the States got rid of their state churches except one—Massachusetts. It took Massachusetts, cradle of religious bigotry and intolerance in America, more than a generation after the adoption of the Constitution of the United States to get rid of its state church.

"Keep the above facts of American history in mind and then you can see how largely this most beautiful jewel in America's crown, this most precious gem in America's diadem of beauty, religious liberty, is a Pennsylvania contribution having its source in the, until now, ignored and forgotten Colony of New Sweden."

The story of religious life and institutions in Pennsylvania is one of great interest because of the variety of religious ideas and prac-

tices included, and of the really significant part which they have played throughout the history of both the province and the Commonwealth. As Pennsylvania was and still is an important meeting-place of large and influential groups of people of different racial and religious origins, so it was and is the most outstanding example among the states of religious variety. This factor was, however, only one which contributes to the interesting story for there are to be added the influence and effect of the ideals of William Penn, the founder, and the provisions in the charters, laws and constitutions which have contributed to the development of a religious life which is unusual.

The religious history of Pennsylvania has a prelude in the beginning of worship and organization among the Swedes on the Delaware before the coming of William Penn in 1681. Organized religious life was established by these people with the coming of the Rev. Reorus Torkillus who accompanied the second group of settlers in 1640. He was a minister of the established Lutheran Church of Sweden. When he died in 1643 he was succeeded by the Rev. John Campanius who later translated Luther's catechism into the language of the Delawares. As early as 1646 Campanius built the first church on Pennsylvania soil on Tinicum Island. The second place of worship on Pennsylvania soil was established at Wicaco, a few miles north of Tinicum Island, within the present limits of Philadelphia. Here stood a blockhouse which after 1677 was used, alternately with the Tinicum Island building, as a church. Another early church was built on the present site of Wilmington, Delaware. When Penn founded his colony he found five to seven hundred people in the settlements, and recognized them as honest, industrious and religious.

The Dutch did not develop any noticeable religious establishment in their short occupation of the Delaware River area. It is likely that worship in the manner of the Dutch Reformed Church was held, but neither church nor minister is known to have existed in their colonial establishment. However, religious interest there doubtless was, and such was under the direction and authority of the officials in New Amsterdam. The Swedish religious activities were not greatly hindered, and there were no religious persecutions under either the Dutch or the Swedes. There was, it is true, no intrusion of other sects to test the tolerance of either group during their respective periods of control.

The Friends, or Quakers, among whom William Penn was a leading figure in his day, appeared in America as early as 1656. Seeking

refuge from persecution in England they found welcome in some places and bitter denial in others.

The center of their activity came to be in New Jersey, Delaware and Pennsylvania which are sometimes called the Quaker colonies.

It was in Pennsylvania, however, that they realized their desire of finding peace for themselves and a haven for the persecuted of all nations. Their great experiment had its beginnings in New Jersey, and by 1681 more than a thousand emigrants, mostly Quakers, had come into West Jersey. Burlington became the most important Quaker center, and there a yearly meeting was established before Penn received his grant to Pennsylvania; other local meetings had been established at other points in the Jersey area. Penn had been interested in the promotion of the Quaker experiment in Jersey, but conditions there were not favorable to the establishment of an unhampered Quaker community so he welcomed the opportunity which the grant of the domain to the west gave him to carry out his ideas without restriction or hindrance. This plan he called "an Holy Experiment."

The majority of the earliest colonists in Pennsylvania were English and Welsh Quakers, and their religious ideas were all-important in shaping the early thought and government of the province.

The life, the aims, the hopes, and the triumphs of William Penn can be understood only in the light of an appreciation of the teachings and practices of the Society of Friends. These people were called Quakers. At first this name was applied to them as a mark of contempt; today it is in accepted usage.

Quakerism, as originated and promoted by George Fox (1624-1691) began to make an impression upon English religious life just at the time when William Penn was born. At first the impression was insignificant, for the believers in the strange doctrine were lowly people. Yet so powerful was the appeal of its early preachers that in twenty years it was a movement which commanded attention. Its teachings were simple and plain, in contrast to those of the official Church of England.

The chief doctrine of the Friends was that of the "Inner Light," which explained that God's revelation is made continuously and directly not merely to theologians but to the heart of every individual, even the most humble, who would know His truth. For this reason, while the Bible was revered and studied, the Quakers did not consider that it was His full and final revelation. Further, they saw no necessity for an organized church with its sacraments or cere-

monies. The only true "church," in their view, is the conscience of the individual, to which truth is revealed if that conscience is allowed to be free. These ideas were extremely distasteful to the people of the organized churches, and for many years the Quakers were persecuted.

This persecution resulted also from their peculiar practices which they considered necessary in the light of their doctrines. They refused to take oaths customary in court and for office-holding. They declined to uncover their heads in the presence of other men, even the King, for they believed all men equal in the sight of God. They addressed all by the familiar forms then used exclusively in addressing social inferiors—"thee" and "thou." William Penn tells of the indignation of one who had been thus addressed by a Quaker: "Thou me, thou my dog! If thou'st me, I'll thou thy teeth down thy throat." To which the Quaker replied: "Why then, dost thou always address God in thy prayers by thee and thou?"

The Quakers called themselves "Friends" because their basis of relationship with all men was that of love. They sought to apply this idea by having friendly and peaceful relations with all men. They strove to treat all as brothers. Therefore they opposed war and refused to bear arms or in any way to contribute to the support of warlike measures. In fact, they opposed the use of force in any form as contrary both to their doctrines of love and of freedom of conscience.

At first they had no meeting places. Streets, taverns or open fields were their gathering places. They trembled when they felt that the "Inner Light" had come to them. Because of this, and because George Fox had bade all people to tremble at the Word of the Lord, they were called "Quakers." They had no paid clergy, but any one who was "moved" by the spirit to speak might testify to his convictions. Some persons with special ability and deep convictions regularly preached and so were known as "preachers."

After some years of meeting in the open air or in houses and barns, they were permitted to erect "meeting-houses." Although they had won the right to worship as their consciences dictated, they still suffered under social and political restrictions. Not only because of their suffering, but also because of their doctrines of love and the freedom of conscience, they firmly believed in religious freedom. They sought freedom for themselves, and when they found it they gladly shared the blessing with all.

In the earliest years of Quaker activity when they were bitterly persecuted, they were inclined to be stern and fanatical. They seemed to welcome martyrdom in order to impress their ideas on men's minds. In later years when they were no longer persecuted, they became less aggressive and extreme in their attitudes. It was this milder kind of Quaker who became the typical representative of the faith in Pennsylvania.

William Penn was born October 14, 1644, in his father's house on or near Tower Hill, London. He who was to be a man of peace came of fighting stock, for his father, also named William, rose to be an admiral in the English Navy. In his service he often traveled to Rotterdam. There he fell in love with Margaret Jasper, daughter of an English merchant who lived there, and they were married. The man of peace was also born in a time of great strife, both political and religious. The political strife had taken the form of a civil war in England. As a result, King Charles I was beheaded, and the Commonwealth, under Puritan control, was established. William Penn had thus a different background than did the early Quakers who were simple people of no recognized social standing.

While Penn was a bright boy, active and fond of sports and loving a joke, from his earliest days he had a deep religious feeling. We do not know much about how he spent his boyhood except that he went to school in Chigwell, Essex, and for a time had a tutor at home as was the common custom among the families of wealth and high social position. Showing promise in his education, he was sent to Oxford University to prepare to be a lawyer.

He entered Christ Church College at Oxford in 1660 but his stay there was brief. He found the university under the strong control of the King and the church, but William Penn sympathized with neither. The meetings of a small group of students attracted him. He joined the group and stood with his fellows in refusing to attend the religious services provided by the university authorities. After some other difficulties he and other members of the group were expelled.

His father was very angry with him not only because of his expulsion but also because of his having fallen under Quaker influence which led to his rebellion against authority. After failing to shake the son's beliefs, even going so far as to send him from his house, Admiral Penn sent William to Paris where he hoped the gay life would turn his mind from his queer thoughts. This did not follow, for he went instead to Saumur and studied in the Protestant college there. One of the teachers in this college taught that war and Chris-

tianity do not mix. This doctrine profoundly influenced his later life and actions. He also learned the French language and gained some of the polish of manner for which the French are noted.

From France he went to Italy to study its language and literature. He was recalled to England in 1664 and began the study of law. This course, however, was interrupted finally by the Great Plague. Penn was among those who fled from the city. Being affected by the horrors of the plague and desirous of turning to a more earnest manner of living, he again worried his father who then sent him to his Irish estates, to be under the direction of the Duke of Ormond. Here in 1666 Penn re-assumed the dress of a gentleman, which he had discarded, and joined in the gay company of a group of young nobles. It is thought that the well-known portrait of him in armor was painted at this time. While he was in Ireland, a mutiny arose among the soldiers at Carrickfergus, and he was sent to help subdue them.

His father now wished young William to take charge of his Irish estates; this he did so well that the admiral was delighted. His joy was to be short-lived, for shortly after this while in Cork on business William heard again the Quaker preacher, Thomas Loe. This was the third time he had heard Loe. The first time when William was eleven years old, his father had invited Loe to preach in his house. At that time so earnestly had he preached that one of the servants cried out loud, the admiral shed tears, and William sat and wondered, "What if they would all be Quakers." Again, while at Oxford, he went to a meeting of Friends, and there heard Loe. This third time Penn could not escape the conviction that he had a divine call through Loe. In 1667 he became a Quaker.

He immediately became a regular attendant at the illegal Quaker meetings, and soon became an ardent preacher. For this preaching he was imprisoned several times, during which periods he began his work of writing religious tracts. During one of them he wrote his most famous book, "No Cross, No Crown."

At first his father bitterly opposed his Quaker interests, but in 1669, his health having failed, he relented and invited the son to come home again. William continued his activity as a Quaker, and in 1670 was again arrested and put into prison until he should pay a fine. This he refused to do, but the father paid it without his knowledge, and he returned home again to find his father near the end of his life. Fearful of the future actions of his determined son whom he nevertheless loved, Admiral Penn requested the Duke of York to

protect his son in later years. This was to have valuable results for Penn.

In 1670 the elder Penn died. William Penn was then a rich man. He had inherited the income of his father's extensive estates; in addition, he held a claim of 16,000 pounds against the King, for money advanced by his father for support of naval forces in the late Dutch wars.

The two years following his father's death Penn spent in touring Holland and Germany where he met and spoke with leading members of Protestant groups. Here he influenced and was influenced by the "pietistic" sects similar to the Friends, some of whom were to become the ancestors of the "Pennsylvania Dutch." For the first time in his life he felt the need for a place of refuge for such as these. Upon his return to England in 1672 he married Gulielma Maria Springett, a beautiful and talented young member of the Quaker group. Their marriage was ideal; she helped him in all his interests and made life very happy for him. In 1677 he again traveled in Holland and Germany; his plan for a place for the persecuted of all lands was very definitely taking shape.

Beginning the Holy Experiment—In 1664 the Duke of York received a grant of all the Dutch claims in North America. In the same year the Duke ceded a part of his grant, the territory later called New Jersey, to Lord John Berkeley and Sir George Carteret. There were already a number of English settlers there, in addition to some Dutch, while in the southern part there were some Swedish settlers. More settlers then came in, and the area began to be well developed. After a few years, the proprietors divided their holding, and Berkeley received the western portion. In 1674 he sold this to two Quakers, John Fenwick and Edward Byllinge, who probably had the support of others of their faith. Fenwick and Byllinge soon developed a difference of interest and opinion, and referred their dispute to the decision of William Penn. Now for the first time Penn saw a practical means of realizing the dream of establishing a place of refuge for the persecuted of England and the continent.

In the decision he awarded one-tenth of West New Jersey, with a sum of money, to Fenwick; the remainder he gave to Byllinge. The latter, however, soon became financially embarrassed and transferred his nine-tenths of the land to three Quakers—William Penn, Gawen Laurie and Nicholas Lucas—for the benefit of his creditors. Fenwick, who was energetic, brought over in 1675 a shipload of Quaker

settlers. The greater number of these remained in New Jersey and founded the town of Salem. Robert Wade, later to be a prominent Quaker in Pennsylvania, went across the Delaware to Upland, later Chester.

Penn and his fellow-trustees improved the estate of Byllinge and induced settlers to come in. Arrangements were made with those to whom Fenwick sold land to coöperate with Penn and his group. In 1676 a government was organized, and in the next year a shipload of immigrants, mostly Quakers, came. It was necessary to buy more land from the Indians on the eastern side of the Delaware to care for the increased area of settlement. Burlington was established later in 1677, and became for a time the chief settlement of West New Jersey.

Reports went back to England that conditions were excellent, and hundreds of Quakers, eager to escape the persecution at home, came to West Jersey. Some settled in Salem, more at Burlington, and some went across the river and secured doubtful titles to lands in present-day Pennsylvania and Delaware by purchase from the Swedes or the Indians. Their settled centers were at the Falls of the Delaware, Shackamaxon, Upland, Newcastle, and Hoarkills. A yearly meeting was established at Burlington in 1681, embracing all the Friends in the present boundaries of Pennsylvania, Delaware and New Jersey.

It is believed that fourteen hundred Quakers came into this general area before Penn received his charter for Pennsylvania. While this development was going on, East Jersey came on the market. Carteret had died in 1679, in debt, partly because his province had not been profitable. To pay the debts the province was sold, and twelve Quakers, with William Penn at their head, became proprietors of that area also. The stream of Quaker migration was then turned in that direction.

While William Penn was finding in the development of the Jerseys an opportunity to establish in the New World a place of refuge for the persecuted of Europe, he did not find this opportunity unrestricted to carry out all that he desired. Remembering the debt of the King to his father's estate, he applied to King Charles II for a grant of land in North America. This he would consider as payment in full of the debt. After many delays the charter confirming the grant was signed by the King on March 4, 1681, and published by royal proclamation.

Penn had drafted the charter himself, using as a model that granted fifty years before to Lord Baltimore for Maryland. Certain revisions were, however, made before Penn's charter was signed by the royal officials. By these the powers of the proprietor were more restricted than were those given to Lord Baltimore, and the interests of the Crown were more definitely guarded. The charter defined the eastern boundary of the grant as the Delaware River, from which it was to extend westward five degrees of longitude; it was to extend from the fortieth to the forty-third degree of northern latitude.



First Methodist Church, Clarion

In this vast domain, the charter established William Penn "true and absolute proprietary of the country aforesaid," but the King's ultimate sovereignty was to be recognized by an annual payment of a token in the form of two beaver skins. To this was to be added the fifth part of all gold and silver found in the province. Penn, the proprietor, was given the power to govern and direct the affairs of the province, but could make laws only "by and with the advice, consent, and approbation of the freemen" of the land. The province was named "Pensilvania" (Latin for "Penn's Woods"), to which Penn objected, on Quaker principles, as an evidence of pride on his part. The King refused to heed his objection, and so it remained.

In August, 1682, Penn obtained from his friend, the Duke of York, grants of all of his property and rights of government on the

west side of Delaware Bay and the Delaware River. The first grant released all claims which the Duke might have on the land given Penn in his charter of 1681. Three days later, the Duke also granted his rights to all land south along the river and the bay to Cape Henlopen. As a result of these grants, William Penn became also the proprietor of the present State of Delaware. This area was for many years referred to as the "Three Lower Counties on the Delaware."

The Significance of Penn's Holy Experiment—At last William Penn had the joy of realizing the opportunity of which he had dreamed. He had in his possession a great domain where he was free to provide a government and establish a social order according to his ideals. While he was happy over this opportunity of a lifetime, he felt also a great responsibility. He looked upon the land as a trust committed to him. Deeply religious, he entered upon his work in a spirit of devotion. He called that which he set out to do "an Holy Experiment." Writing to a friend in August, 1681, he said:

"For my country, I eyed the Lord in the obtaining of it, and more was I drawn inward to look to Him and to owe it to His hand and power, than to any other way. I have so obtained it, and desire that I may not be unworthy of His love, but do that which may answer His kind providence, and serve His truth and people; that an example may be set up to the nations; there may be room there, though not here, for such an holy experiment."

Thus under the benevolence of William Penn, true democratic principles of freedom, liberty of conscience and love of one's fellowmen were founded in Pennsylvania. These principles and ideals were to live in the hearts of those who came to Penn's new land for many years. Under the ideal of love all humankind shall live. Indians and white men were to live peacefully together for more than seventy years. The love for freedom in the hearts of these and other peoples that came to live in Pennsylvania was so real that they endeavored time and again to preserve Penn's democratic and peaceful principles, even though later proprietors tried to limit the rights and freedom of the common man. Eventually, similar democratic ideals were to play a great part in throwing off the yoke of English rule.

Truly it was a Holy Experiment, destined to be a great and lasting influence in the growth of a great State.

Penn's First Visit to Pennsylvania—With matters of importance disposed of, Penn was at last free to visit his province and take possession of it in person. He set sail early in September, 1682, on the ship "Welcome," accompanied by one hundred immigrants. Small-pox attacked the party and thirty died. When the ship was almost in port, a child was born who was named Seaborn Oliver. At New Castle, Penn first set foot on his own soil. Assembling the people, he took formal possession of the lower counties—New Castle, Kent, and Sussex. The Duke of York, only several months before, had renounced his claim to this land in Penn's favor. He promised the people the blessings of religious and civil liberty and renewed the commissions of their officials.

Arriving on the soil of Pennsylvania on October twenty-ninth, he changed the name of Upland to Chester. The influence of the English language and the English rule was thus shown, and Swedish names were soon generally replaced by English place-names. After a brief stay at Chester, Penn proceeded still farther up the river to his capital city, landing, as tradition has it, at the mouth of Dock Creek (now Dock Street) in front of the Blue Anchor Tavern. A few houses had been built on the site of the planned city and more were being constructed, but there were not yet enough to shelter all newcomers. A number of these lived in caves dug in the bank of the river. In such a cave lived Francis Daniel Pastorius where his friend, William Penn, visited him in 1683. The visitor laughed at the Latin inscription placed over the door. Translated it read:

"A Little House
But a Friend to the Good;
Keep away, Ye Profane."

Pastorius was a learned man who led out a little band of religious refugees from Germany. They came in the ship "Concord" in 1683. This was the beginning of German immigration to Pennsylvania, which later was to contribute so much to the growth and enrichment of the province. Pastorius has long been given the honor of having founded Germantown, six miles from the city of Philadelphia. It is likely that the first settlers on that site, however, were Dutch Mennonites and Quakers, who had lived in Germany. Their little settlement attracted the Germans who came in larger numbers and soon dominated it.

Desiring to establish local government on as firm and lasting a basis as the provincial government, Penn organized the three original

counties of Pennsylvania. These he named Philadelphia, Bucks and Chester. In these three counties and also the three "lower" counties he summoned all freeholders to a general assembly to be held at Chester on December 4, 1682. In a four-day session this assembly of about forty freeholders did much work of an important nature.

It formally annexed the three lower counties, naturalized the non-English settlers and enacted the "Great Law" which remained in its essentials the basis of law for colonial Pennsylvania. This law provided for religious liberty—modified however, by the restriction that all officeholders and voters must profess and believe in Jesus as Son of God and Saviour of the World; it also provided for the care of the poor, for regulating courts of justice and for many other matters. A great advance over the law of the mother country, this code foreshadowed the more humane and democratic codes of the future.

Penn in the early years of the province of Pennsylvania labored hard to organize a government which would fulfill his noble purpose to carry on the "Holy Experiment." When he died his successor continued to govern the province, but the generous policy of the founder was forgotten. For one thing, the policy of fair-dealing with the Indians was not practiced, and as a result after some years the horrors of Indian warfare came to be felt.

The Indians were encouraged by the French who were determined to keep the English settlements confined to the area east of the Allegheny Mountains. But the English were not willing to be confined, and the final war in the struggle between England and France began in western Pennsylvania.

The Anglicans, or Episcopalians—The established church of England was and is known as the Church of England and its adherents are called Anglicans. Throughout the colonial period this faith was represented in Pennsylvania. However, when Independence was won the official English church, founded by the English King, Henry VIII, had no means of continuing in the United States, and the people who desired to retain its features organized an American branch to which the name Protestant Episcopal was given. The adherents of this church are popularly known as Episcopalians.

Although it was recognized that William Penn was planning to establish a refuge for the persecuted religionists of Europe, care was taken in the charter given him in 1681 to protect the rights of the established church of the Kingdom. It was accordingly provided that when twenty or more inhabitants should signify their desire to

the Bishop of London for the appointment of a clergyman of the Church of England for their instruction, such appointment should be made and the manner of worship should not be disturbed. As a result of such an appeal a small congregation was organized in Philadelphia with Evan Evans in charge. In 1695 a building was provided, and famous Christ Church began its historic career. The membership was drawn mainly from the non-Quaker English inhabitants who began to come into the province, but some Welsh were also included. The number of adherents was never large, but the church was influential because of the financial and commercial power of its members. Three churches in Philadelphia and thirteen churches and chapels outside the city, with more than three thousand members, had been established by 1776. Now when a controversy among the Quakers occurred, George Keith led out a number of Quakers from the regular or "orthodox" group. As a result of this split some eight hundred of these Keithian Quakers followed their leader when he was sent to Pennsylvania in 1702 as a missionary of the Church of England. The chief religious issue involved was Keith's belief that the Quakers exalted the Holy Spirit at the expense of the authority of the Bible.

From the character of its membership and of its clergy it was not strange that this church should have had many who opposed Independence. As a result the church was greatly weakened during the Revolution. However, a convention to organize the American Episcopal Church was held in Philadelphia in 1785 under the presidency of the Rev. William White, who in 1787 was consecrated a bishop in the church. With the church, now fully Americanized, a new day dawned for the Episcopalians and by 1790 there were in Pennsylvania nineteen congregations and a membership of over three thousand.

The Baptists—Another church to which English and Welsh people adhered was the Baptist Church the first organization of which was formed at Cold Springs in Bucks County in 1684. This disbanded in 1702 but in the meantime a congregation had been organized in 1688 at Pennypack or Lower Dublin, which became the first permanent Baptist church in Pennsylvania. The first church of the denomination to be organized in Philadelphia had its beginning in 1698. The churches established in southeastern Pennsylvania profited by the accession of many Keithian Quakers who did not follow their leader into the Church of England. A notable event in American

Baptist history took place when the few churches in and about Philadelphia organized in 1707 the "Philadelphia Baptist Association." This was the beginning of the development of the denomination and remained for fifty years as the only Baptist association in America. The Redstone Baptist Association was organized for the churches west of the Alleghenies in 1776. In 1790 the Baptists had twenty-eight churches in Pennsylvania, with twenty-seven ordained and seven licensed ministers, and 1,260 adult members, making a Baptist population of some five thousand. The great growth of this denomination came in the national period when large numbers were counted in the eastern and southwestern portions of the State.

The first church of this denomination was founded in 1608 by a body of English refugees in Amsterdam. In 1639 the movement was introduced into Rhode Island and Roger Williams became its chief leader. It was founded upon the principles of personal liberty and freedom of belief and so developed an independent, congregational form of organization. Each individual congregation is a separate unit, having full authority in all matters of faith and organization. The churches, however, unite in district associations for mutual help and the promotion of such general interests as missions, education, and publication.

The Methodists—The Methodist Church of the present day did not originate as a separate denomination, but was founded by John Wesley as a devotional society within the Church of England. Before the colonial period was over, however, Methodism was on its way of becoming a separate denomination.

Because the atmosphere of the Church of England in the eighteenth century was not congenial to the practice of personal piety, the drift toward a separate organization began and a final break came. However, Wesley himself, an ordained clergyman of the Church of England, never left it. The authority of the church is in the conference which is presided over by a bishop. In Methodism, however, the bishops are in fact general superintendents rather than carriers of an "apostolic succession" as in the Episcopal Church.

The first Methodist sermon preached in Pennsylvania was by Thomas Webb, a British officer who had been converted by the preaching of John Wesley. This was in 1768. The next year two missionaries arrived in Philadelphia and one, Pilmoor, remained to serve a congregation which Webb had gathered. This congregation, numbering about one hundred members, in 1769 purchased an unfinished church building on Fourth Street and established St. George's

Church, the oldest Methodist Church building in America. The Methodist Episcopal Church was formally organized in America in 1784 and the denomination then began a vigorous separate existence. However, by 1790 there were only eight ministers and about 1,460 members of the church in Pennsylvania but the existence of the pastoral circuits in Philadelphia, Chester, Bristol, York, Huntingdon, Redstone, and Pittsburgh promised future growth.

The Lutherans—The Lutheran Church in its present form dates from the Protestant Reformation of the sixteenth century, and preserves not only the name but also the faith and purpose of Martin Luther. It is a liturgical church and it exalts the value of the sacraments. It has usually taken the form of organization most suited to the land in which it is situated. In America, under the influence of democratic forms, it is congregational in final authority, although from early times it has combined its congregations into synods for general administrative purposes.

Reference has already been made to the development of the Swedish Lutheran churches in Pennsylvania prior to 1681. For a few years after that date the people had the services of two clergymen but by 1692 both of them had passed away. The churches seemed to have been forgotten by the Swedish Church which had fostered them but in response to advances made in 1693 a new day dawned for the Delaware congregations, for the Swedish King, Charles XI, was concerned about them and enjoined the church officials at home to send clergymen and books as they requested. At mid-summer, 1697, three clergymen arrived and for the next seventy-five years the Church of Sweden maintained very close relations with the American mission. In that period there were sent twenty-four clergymen. Under the inspiration of the clergymen who came in 1697 new churches were built, first at the present Wilmington, Delaware, and the following year, 1700, at Wicaco. This is the oldest church building in existence in Pennsylvania and is still known by its original name, *Gloria Dei*. As the years went by it became evident that these older congregations, and others which had later been organized, were fast becoming Anglicized. By the time that the Rev. Nicholas Collin began in 1770, what was destined to be the final ministry under commission from Sweden, the Swedish language had disappeared from all the churches as the regular language of the services. Shortly afterward support from Sweden ceased and with the death of Collin in 1831 the congregations accepted ministers of the Episcopal Church and were transformed into regular Episcopal churches.

The Lutheran Church did not die out in Pennsylvania through the loss of the Swedish congregations, for shortly after Penn received his grant a new source of Lutheran migration began. This was from Germany. The first Germans to come to Pennsylvania were of the persecuted sects who looked upon Penn's land as a Promised Land. The majority of the people of Germany, being of the recognized churches, felt no need to go out from that land in search of religious freedom. However, as the seventeenth century closed they began to feel a real need to flee their native land in order to preserve their lives. The attacks by the French under Louis XIV made of the rich Rhineland a place of desolation, with the attacks repeated time and again until the eighteenth century had well begun. Of those who came in this early German migration, the majority were of the Lutheran and the Reformed churches, with the Lutheran element much larger than the Reformed.

The first German Lutheran Church service in America is said to have been that conducted for some German Lutherans in Germantown in 1694 by an eccentric preacher, Heinrich Koester. Lutherans continued to come to Pennsylvania and in 1703, the first German Lutheran congregation in America was organized by Daniel Falckner at New Hanover. In rapid succession congregations were organized wherever groups of Germans settled, and in 1742 the Rev. Henry Melchior Muhlenberg arrived to direct the affairs of these churches. In 1748 a synodical organization was effected which later developed into the Ministerium of Pennsylvania, the oldest synodical body of the church in America. By 1750 the number of Germans who had come into the province had greatly increased and the area of German settlement had greatly expanded. Lutheran church organization kept pace with this growth and expansion so that in 1776 there were about 125 churches and an estimated total Lutheran population in Pennsylvania of sixty thousand. In 1790 the number of churches were about 160 and the estimated total Lutheran population was seventy thousand.

The Reformed—The other large element of the German migration into Pennsylvania was that in connection with the German Reformed Church. While some Dutch Reformed congregations existed in Pennsylvania in the early years of the eighteenth century, the true history of the Reformed Church in Pennsylvania is that of the German Reformed.

What Martin Luther is to the Lutheran Church so Huldreich Zwingli is to the Reformed Church. After the early death of Zwin-

gli, of Switzerland, John Calvin, who came to Geneva from France, became the spiritual leader of this body. For this reason the doctrines and form of organization are moderately Calvinistic and similar to those of the Presbyterians. But Zwingli's original influence remains. These ideas not only took hold in Switzerland but were carried into Germany where a strong minority embraced them.

The great figure in the early history of this church in Pennsylvania was the Rev. John Philip Boehm who organized the first German Reformed congregation in Pennsylvania at Falckner's Swamp in 1725. At that time the tide of German immigration began to run higher and the number of people of the Reformed faith greatly increased and extended their areas of settlement. Into these new settlements pastors went and organized a number of new churches. In 1747 the Rev. Michael Schlatter organized the Coetus, a body of local churches. This was subordinate to the Classis of Amsterdam of the Synod of Holland which, rather than any of the bodies of the German church, assumed oversight and support of the young American organization. The connection was maintained until 1793 when the Coetus declared its separation and became an independent synod.

The Reformed Church in Pennsylvania had about one hundred congregations in 1776, with an estimated constituency of thirty thousand which by 1790 had increased to approximately thirty-five thousand. An important and interesting relationship early developed between the Lutherans and the Reformed, notwithstanding their wide differences in doctrine, in the joint construction and use of so-called "Union" churches. Many of these exist today, especially in eastern Pennsylvania.

The Smaller German Churches—Pennsylvania was the principal place of settlement for the persecuted smaller German groups (sometimes called "German Sectarians") in colonial days. It remains today as the area of greatest concentration of their descendants, although many of these have also gone into other states of the Union. These people were never more than a small part of the total German population of colonial Pennsylvania, but because of their distinctive, even picturesque, qualities, they have often been incorrectly assumed to have been the predominant element among the Pennsylvania Germans. The greater number of them adopted plain dress, a simple code of living, and peculiar social practices. They lacked interest or even participation in civil and political life, were conscientious and consistent believers in non-violence, and refused to take oaths or indeed to appeal to the courts for the settlement of difficulties.

Since many of their numerous descendants still live much as their colonial ancestors did, their distinctiveness has made an impression which is lasting and intriguing. Pennsylvania has greatly profited by their residence as they have made up an industrious, thrifty, and decent-living element whose value to the colony and the State has been considerable. While by no means in agreement in doctrine and practice, these smaller German churches are considered together. They all are of one line of effort at religious reform in the sixteenth century; they all sprang from the thoughts and the labors of the "Spiritual Reformers" whose ideas were radically different from those of the founders of the great Protestant churches.

Among the first settlers in Pennsylvania after Penn had established his government were Mennonites who came on the ship "Concord," under the leadership of Francis Daniel Pastorius. They were direct descendants of the radical Protestants of the Reformation period and received their name from Menno Simons whose ideas were very different from those of the officially recognized Protestant churches. For this reason they were persecuted and so sought a refuge in Pennsylvania. In many of their social ideals they were like the Quakers and so found a congenial place in the Quaker colony. Some of their number became Quakers but in 1688 their first congregation was formed in Germantown and in 1708 their first church building was erected. Later immigrations brought more of their faith and by 1712 there were probably two hundred families in Pennsylvania. Lancaster County became their chief point of concentration, many of those settled there being German-speaking Swiss. By the end of the colonial period there were some two thousand Mennonite families in America; most of them in Pennsylvania. In this number were included a number of very conservative members who were known as Amish Mennonites, or popularly as the Amish, who followed the teachings of Jacob Amen under whose leadership certain Mennonites severed their connection with the parent church in 1698. They first made their appearance in Pennsylvania in 1709. The outstanding features of Mennonite doctrine were the acceptance of the Bible as the only rule of faith, and the rejection of infant baptism but without insistence upon immersion as a mode of adult baptism. They, like others of the smaller German churches, had no paid ministry, but received the free services of pious men whom they chose and ordained to ministerial status.

An interesting early effort by the Mennonites to settle in the Delaware Valley was that of Pieter Cornelius Plockhoy, a Dutch Men-

nonite, who in 1663 brought to Hoorn Kill twenty married and single men. He was not only seeking a place of religious freedom but was also concerned to establish a communistic experiment. Nothing is known of the fate of this colony but it is assumed that it was destroyed in the English conquest of the Dutch empire in North America.

Difference in doctrine concerning the mode of baptism chiefly accounted for the movement which Alexander Mack and others began in Schwarzenau, Germany in 1708. Mack's distinctive teaching was that of trine (three times) immersion, whence the name Taeufer, or Tunker, or Dunker (*i. e.* "Dipper"), or Dunkard, as the name came commonly to be applied. In 1719 the first of those people, fleeing persecution, arrived in Pennsylvania under Peter Becker, to be followed shortly by others under Alexander Mack. Their numbers were not large; in 1790 they had some nineteen congregations, twelve of them having two hundred or more members. Unofficially they became known as the "German Baptists," while officially a large section of the present greatly enlarged number is called the "Church of the Brethren."

In addition to the typical pietism of these groups, there appeared a strain of asceticism on several occasions. The first evidence of this was in 1694 when Johannes Kelpius led a band of forty enthusiasts, known variously as Rosicrucians, Pietists, and members of the "Society of the Woman of the Wilderness," to Pennsylvania where they settled on the banks of the Wissahickon, close to Germantown, there to await the "Coming of the Lord." The organization, however, disappeared within a few years.

Something of the same spirit is seen in the founding of the Ephrata Cloister on Cocalico Creek in Lancaster County by Conrad Beissel who withdrew from the ministry of the Dunkards in 1728. Beissel withdrew because he was a teacher of "strange doctrines" such as the denunciation of the marriage state and the advocacy of the seventh day as the Sabbath. The result of his withdrawal was the establishment of the Seventh Day German Baptist Church, and of the Cloister which was a religious community and a self-sufficing economic society. At the height of its prosperity under Beissel the community numbered about three hundred who lived under a kind of monastic society under the strict government of Beissel. After his death it began to decline and later, while a religious organization was maintained, the community organization passed away, although some of the buildings remain today under the control of the Common-

wealth. A branch community was established in Franklin County in 1763.

Another small group were the followers of Kaspar Von Schwenkfeld whose views, stated in 1525, were unacceptable alike to Catholics and Lutherans of Germany. Threatened with conversion by force they fled from Silesia, where they had prospered, and some came to America in 1733-34. Two groups arrived in Philadelphia in 1734 and settled mainly in the eastern counties where Germans were already settled. Only two congregations were formed in colonial days and their numbers totaled only some three hundred but they were a simple and industrious people whose contribution to colonial Pennsylvania was by no means of little account.

The Moravians, who trace their origin to the Hussite movement in Bohemia in the fifteenth century, came to Pennsylvania after a stay in Germany under the protection of Count Nicholas Zinzendorf. The destitute religious situation of many of the German settlers in Pennsylvania before the other churches became really effective led them to Pennsylvania, after a colony established in Georgia had failed. A group of them transplanted this colony to Pennsylvania in 1740 and made that province the center of their missionary work among both the German settlers and the Indians. In December, 1741, Zinzendorf arrived and just before Christmas he reached the Moravian settlement at the forks of the Delaware and on Christmas Eve named this settlement Bethlehem. Shortly afterward another settlement was made nearby at Nazareth and in these two settlements a semi-communistic system was established which was to operate for twenty years, or until the settlements were fully established.

As time went on congregations of Moravians were established in a number of different places and the numbers increased both by additions from abroad and from natural growth in Pennsylvania. In 1776 they numbered about twenty-five hundred but their influence in the religious life of Pennsylvania was not in proportion to their relatively small numbers. They were a devoted and energetic people and deeply concerned in missionary work, especially among the Indians, for whose religious welfare they strove more zealously and effectively than any other Protestant group in colonial America. An important contribution of this group was the introduction and promotion of fine church music.

The Moravians, or the "United Brethren," as they styled themselves, sprang from the "Bohemian Brethren," a branch of those who followed the pre-Reformation martyr, John Huss. Driven out of

their native land, they found a refuge in 1722 on the estate of Count Zinzendorf in Saxony. Under Zinzendorf, who had been received into the Lutheran ministry but who in 1737 joined with the Moravians, a new and vigorous missionary program was begun. Zinzendorf remolded the doctrines and purposes of the group and made its theology, in its main features, Lutheran. They developed a religious life combining warm emotion with a quiet and serene manner of feeling.

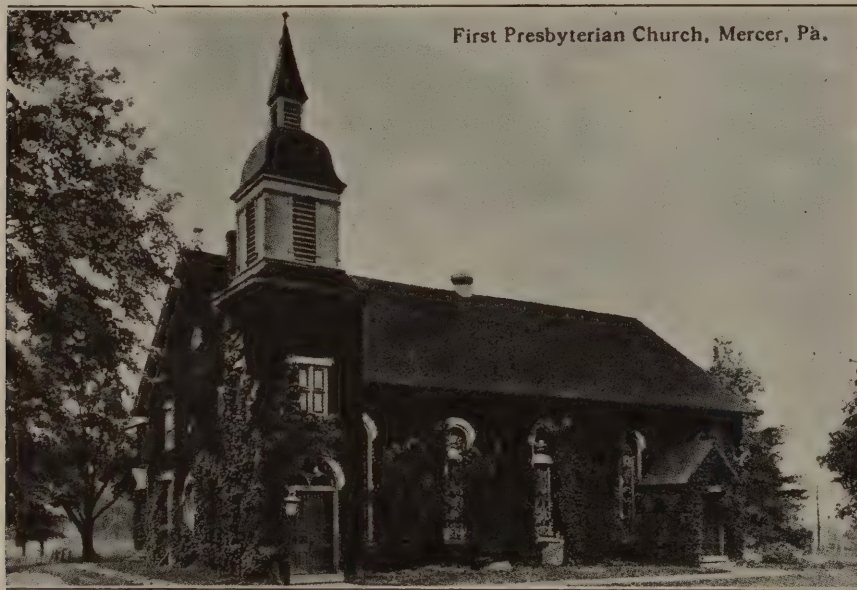
The Presbyterians—One of the most important denominations of Christians in Pennsylvania in colonial days developed but little from English, Welsh or German sources. It was brought to Pennsylvania directly from Ireland but indirectly from Scotland. It was the church of one of the most numerous and most vigorous of all the racial groups to settle in Pennsylvania. When large numbers of Lowland Scots accepted the invitation of King James I to migrate to Northern Ireland they naturally took with them their church—the Presbyterian. When dissatisfaction with the way conditions had developed in Northern Ireland caused these Scotch-Irish to migrate again in large numbers to America, they naturally took their Presbyterian church with them. Pennsylvania offered an attractive place of settlement and into Pennsylvania, especially after 1718, they came by the thousands, remaining to settle in the back-country, or moving southward into Virginia and the Carolinas.

The Presbyterian Church derives its name from its form of government. It teaches that the ministers are the representatives of Christ and the ruling elders are the representatives of the people. A group of congregations within a limited district makes up a presbytery which is governed by the ruling elders (presbyters) and ministers (teaching elders) who represent the member churches. The presbytery has great power over the ministers and congregations under its jurisdiction. Its doctrinal system is known as Calvinism. John Calvin led the Reformation in Geneva and was the leader of a movement distinct and different from that of Martin Luther. He never founded a distinct denomination, but he taught and put into practice principles which in other lands and in other hands developed into both the Presbyterian and the Reformed denominations.

A noted visitor to Geneva to learn of Calvin was John Knox of Scotland. Upon his return to his native land in 1555 he stirred the leaders of the people who united in the first covenant to renounce their faith and defend the Protestant cause. In 1592 the Scottish

Parliament made Presbyterianism the national religion of Scotland, and by 1690 it was finally established on the basis of the Westminster Confession of Faith. Presbyterian influence was also felt in England in the seventeenth century and was, of course, carried to Northern Ireland.

Before the stream of Scotch-Irish immigration began to flow strongly toward Pennsylvania, a Presbyterian church had already been begun. A congregation was organized in Philadelphia in 1698.



First Presbyterian Church, Mercer, Pa.

(Courtesy of the Mercer County Dispatch and Republican)

First Presbyterian Church, Mercer—Erected in 1830, Burned January 21, 1928
Congregation Organized in 1804

People favorable to Presbyterian ideas had been coming to Pennsylvania and nearby colonies from England and Scotland. As a result, more churches were organized and in 1706 the Philadelphia Presbytery was organized. This was the first American presbytery and in 1717 the first American Presbyterian synod was organized. Then the high tide of Scotch-Irish immigration began to come in, and soon the location of Presbyterian churches, especially west of the original area of settlement, marked a rapid growth and spread of this religious element.

More presbyteries were organized and some Presbyterian churches of other connections were established. By the time of the Revolution, the Presbyterians made up the most numerous of the

religious groups in Pennsylvania, having upwards of seventy-five thousand in their constituency. In 1790 upwards of one hundred thousand people, served by eighty ministers and 165 churches, were in this connection. The church was organized on a national scale with the meeting of the First General Assembly in Philadelphia in 1788. Pennsylvania has been a stronghold of Presbyterianism in the United States.

The Evangelicals—In 1790 Jacob Albright, who then lived in West Cocalico Township, Lancaster County, Pennsylvania lost several of his children by death. On the occasion of their burial Rev. Anthony Hautz, a Reformed minister, officiated. The service had a pronounced effect upon Albright, although for a long time he was on the verge of despair. Not far from him lived a minister named Adam Riegel, who, like many others of his day, stood independent of the churches. To this man Albright went for counsel and help after being in distress for over a year. Referring to Albright, an author says: "The Sun of Righteousness then arose upon him with healing in his wings, and he was converted in the house of Riegel, in 1792, and together they subsequently enjoyed many happy hours in Christian communion and devotion."

The early German converts had an aversion to a separate church organization, but Albright did not share that feeling. He felt the need of a church in which he could serve God according to his new light and experience. He therefore united with the Methodist Episcopal Church, a class of which had been established in his locality. Although a German, so well did his Methodist brethren think of Albright that they granted him license as an exhorter. After laboring in this capacity for some time, he felt the call to the ministry. The difficulties in the way, however, seemed insurmountable. The church with which he was connected was English in language, while the people with whom his labors as a minister could be successful, were German. After much serious consideration and prayer, he finally determined to enter the gospel field as an independent evangelist, and labor among his German countrymen, in the belief that God had called him to this work. Albright never withdrew from the Methodist Church, nor was he excluded. His membership simply lapsed when his sphere of usefulness was enlarged from the exhorter to the itinerant preacher.

In 1796 Albright started on his first evangelistic tour, which, as he himself says, embraced a portion of Maryland and Virginia and

the interior of Pennsylvania. The first definite account of his labors refers to October of this same year, when he preached at the market house at Shaeferstown, Lebanon County, Pennsylvania, on the occasion of the dedication of the new Reformed Church at that place. It is difficult to obtain definite information of his early labors, for the reason that he doubtless preached at many places where all ministers were alike welcome. It is known that he preached in the eastern part of Berks County, near the Colebrookdale iron works; at Quakertown, Bucks County; in Penn Township, Schuylkill County; in Northampton County, along the Blue Mountains and in what is now Lebanon County, near Jonestown. As the number of his converts increased, he saw the necessity of organizing them into classes. This he did in 1800, when his adherents numbered about twenty.

The first class was formed on the Ridge, three miles east of Quakertown, Bucks County, and consisted of Charles Bissey and his wife, and Peter Walter with his wife and family. The second class was formed about twenty miles southwest, at the Colebrookdale iron works, in Berks County, and consisted of Samuel Liesser, his wife and several children, Abraham Buchwalter and wife, and Joseph Buchwalter and wife. The third class was formed along the Blue Mountains, in Hamilton Township, Northampton County, and consisted of George Phillips and his two sons, Conrad and Jacob, and their wives, Jacob Riedy and wife, Philip Miller and wife, and Barbara Hecht.

After Albright had labored in the gospel ministry about six years, it was felt necessary to give a more definite and formal recognition of his call and work. Hence a general council assembly was called, which met November 3, 1803, at Samuel Liesser's. Besides Albright and his two assistants, John Walter and Abraham Liesser, there were present fourteen laymen. This assembly effected an organization; Jacob Albright was declared to be a minister of the gospel in the full sense of the term and was recognized as their leader and teacher; he was ordained and given a license or commission, of which the following is a close translation: "From the Elders and Brethren of His Society of Evangelical Friends. We, the undersigned Evangelical and Christian friends, declare and recognize Jacob Albright as a genuine Evangelical preacher, in word and deed, and a believer in the Universal Christian Church and the communion of saints. This testify we as brethren and elders of his society. Given in the State of Pennsylvania Nov. 5, 1803." The document was signed by Albright's two colleagues, Walter and Liesser, and the fourteen laymen present.

Sometime between 1805 and 1807 another council was held in the house of George Becker, of the Muehlbach. Of this meeting there is no record. The first regular conference was held in November, 1807, at the house of Samuel Becker, on the Muehlbach, Lebanon County, a few miles east of Shaeferstown. With this conference the official history of the association properly begins.

The first church edifice of the Evangelical Association was erected at New Berlin in 1816, and dedicated March 2, 1817, by Rev. John Dreisbach, who preached from Psalm xxxvii, 4. The building was a log structure, 34x38 feet in dimensions. In later years it was remodeled and surmounted with a belfry and bell.

The membership of this denomination is greatest in the central and eastern parts of Pennsylvania.

The Catholics—This largest of all Christian religious bodies carries the tradition of the original organization of Christianity at the beginning of the Christian era. Representing, under the primacy of the bishop of Rome (the Pope), the line of tradition since St. Peter, it has represented a strongly unified development. It was unchallenged as the Voice of God in Western Europe until the sixteenth century, when the Reformation occurred and the new Protestant churches followed.

Catholic beginnings in Pennsylvania are generally attributed to missionary activities of the Jesuit fathers of Maryland. While there were people of this faith in Pennsylvania before 1729, and very probably Mass was offered before that, it remains as the approximate date of the beginning of authentic Catholic history in Pennsylvania. This is the date of the arrival of Father Joseph Greaton, a Jesuit from Maryland. He laid the foundation of a congregation which survives today—St. Joseph's of Philadelphia.

It is altogether likely that at as early a date regular religious services were being given by Maryland priests to the people of the frontier settlement at Conewago, near the present city of Hanover. In 1741 two German Jesuits were sent to Pennsylvania for service to German immigrants who were by this time coming into the province in great numbers. These priests were Fathers Theodore Schneider and Wapeler. The latter was the first known priest to serve the Conewago settlement and the former founded and served a number of congregations in eastern Pennsylvania. In 1740-41 Pennsylvania appears in the records of the Society of Jesus as a distinct mission, and Father Greaton was its first Superior.

The number of adherents grew and churches were established at a number of points so that in 1757 there were approximately 1,365 accounted for of both German and Irish extraction, with a few English. With the passing of time the Catholic population grew in Pennsylvania until in 1776 there were about five thousand in connection with the church, while in 1790 the results of a further growth is in evidence when a total of ten thousand is shown. The great growth and importance of the Catholic Church in Pennsylvania is a feature of the national period. While the numbers in connection with the church were relatively few in the colonial period yet Catholics were more numerous in Pennsylvania than in any other colony except Maryland.

The Jews—Opportunities for trade early led individuals of the Jewish race into Pennsylvania. Very naturally Philadelphia was the first center of attraction and in 1740 a permit was issued for a Jews' burying ground in that city. In 1774 the first Jewish congregation in Pennsylvania was organized also in Philadelphia under the name of Kahal Kadosh Mikveh Israel ("Hope of Israel") but it was not until 1782 that this congregation built a synagogue. Lancaster was the second oldest place of Jewish concentration in Pennsylvania, trade with the Indians being the reason for the selection. A congregation was organized at Lancaster in 1776. Easton was also a place of Jewish concentration. Jews of various races came to Pennsylvania but Germans predominated. The number was never large and in 1790 the estimated number was only eight hundred but economic success was usual among this minority.

Religious Freedom in Pennsylvania—William Penn had an earnest desire to put into operation in his province the principle of religious liberty. Being disappointed in his experience in West Jersey, he found his opportunity when he received his charter for Pennsylvania. Section I of the Great Law of 1682 established liberty of conscience, but Section II restricted the right to hold office and to vote to such as "profess and declare they believe in Jesus Christ to be the Son of God, the Saviour of the World." As a result of this provision, all Unitarians, Jews and Atheists were denied a share in the government, but not in the exercise of the liberty of conscience or of worship. For all practical purposes, especially when the harsh conditions of the day are taken into account, this restriction was of little importance since the great blessing of freedom of conscience was clearly put into operation. That William Penn was denied the satis-

faction of seeing his liberal policy finally and fully operative in his province was no fault of his own.

Contrary to his earnest desires, religious liberty, together with the enjoyment of full political rights, did not legally exist in Pennsylvania for the greater part of the colonial period. This resulted from the loss by Penn of his independent power because of conditions in England after 1688. In 1693 he even lost his province temporarily and Fletcher, Royal Governor of New York, was made Governor of Pennsylvania also.

Fletcher was directed to summon a general assembly in Pennsylvania whose members were required to qualify by taking oaths prescribed by the Toleration Act of 1689. This great Act had been passed to permit Dissenters in England to enjoy freedom of worship which earlier laws had forbidden. Certain "declarations and tests" required by this Act were of such nature that many people would not take them for conscience's sake, but Fletcher chose to demand that they be taken before one could qualify for office in Pennsylvania. This put an end to the operation of the Great Law; for Penn, even though his province was restored to him, was never able to reestablish his earlier liberal policies. After he returned to England permanently, the Pennsylvania Assembly was finally forced to pass legislation which definitely put people with certain religious ideas at serious disadvantage. Catholics were especially affected.

The effect of this legislation was to reserve the rights of office-holding and of voting to orthodox Protestants, according to the standards of orthodoxy then prevailing; to allow such alone to hold church property, and to prevent Catholics from becoming naturalized. It is clear that all of this was in direct opposition to the expressed will and purpose of William Penn when he planned his "Holy Experiment."

Notwithstanding these laws, it may still be said that practical liberty of conscience and freedom of worship were enjoyed in Pennsylvania for the greater part of the provincial period without noticeable restraint. Some of the laws soon became dead letters. For example, German Catholics held land and built churches without evident attempts by the authorities to hinder them. Irish Catholics had the same freedom, while Jews were to be found in several parts of the province, apparently going freely about their business and openly meeting for worship. It is true that all these did suffer political disabilities. It may, therefore, be said in conclusion that while the ideals of William Penn were not fully realized, their influence was not entirely lost.

This condition prepared the way for the provision of the Constitution of 1776, declaring that a belief in God and an acknowledgment of the inspiration of the Old and New Testaments were all that should ever be required of any civil officer or magistrate in the new State. The "Declaration of Rights," attached to the same constitution, established complete freedom of conscience and of worship for the individual. Only the following restriction was made: "Nor can any man, who acknowledges the being of God, be justly deprived or abridged of any civil right as a citizen, on account of his religious sentiments or peculiar mode of religious worship." On such a broad basis of religious freedom the Commonwealth of Pennsylvania established itself as a free and sovereign State. Just as soon as the restraining influence of the English government was removed, the ideals of William Penn were restored to operation. The final basis, after even further liberalization, under which the religious liberty of the people of Pennsylvania has been guaranteed these many years, was set up in the Constitution of 1790 and repeated exactly in the Constitution of 1838 and 1873 as follows:

"All men have a natural and indefeasible right to worship Almighty God according to the dictates of their own consciences; no man can of right be compelled to attend, erect or support any place of worship, or maintain any ministry against his consent; no human authority can, in any case whatever, control or interfere with the rights of conscience and no preference shall ever be given by law to any religious establishment or modes of worship.

"No person who acknowledges the being of a God, and a future state of rewards and punishments shall, on account of his religious sentiments, be disqualified to hold any office of trust or profit under this Commonwealth."

Racial Variety and Religious Diversity Continue—It has been shown that colonial Pennsylvania was made up of diverse racial and religious elements. No other English colony in North America even approximated, in such numbers, this condition in variety of racial groups, which was the chief factor in producing a like variety of religious groups. This condition was true not only in colonial times but after 1790; as the population increased, the racial diversity became still more marked. Beginning in 1790 and down to the present day the fact of racial and religious variety can be clearly seen.

Aside from the natural growth of population, colonial Pennsylvania grew rapidly because of immigration. When the national period began, a natural increase would have continued for some time to come in the diversity which the colonial composition showed, even if there had been no immigration. However, even though the flow of immigration had slackened for a period of twenty-five to forty years after the beginning of the War for Independence, a new wave began to flow into Pennsylvania, greatly exceeding in volume that of the colonial period. To 1840, particularly after 1820, a moderate immigration from Great Britain and Ireland added to the population. After 1840, and until 1890, the new wave brought the Irish, this time from southern Ireland. They came in such numbers that in 1890 they constituted the largest body of foreign-born in the Commonwealth. The second largest element in this period was the German, with the English third, and smaller numbers from Wales, Scotland, Sweden, France, Russia, Italy and the Austria-Hungarian empire. Thus up to 1890 the mass of immigration into Pennsylvania came from northern Europe and the British Isles.

After 1890 the character of the immigration changed radically, that from northern Europe and the British Isles diminishing while that from southern and eastern Europe was enormously increased. The predominant strains in this new immigration were Italian and Slavic, with lesser numbers coming from every other country in Europe, including those countries which had been the chief sources of the older immigration. The industrial and mining centers largely attracted these new peoples seeking better opportunities than the home countries offered. These centers were cross sections of the foreign-born population of the United States as the twentieth century progressed. An interesting study of the situation in the anthracite coal communities in Pennsylvania about 1904 showed that the foreign-born people in those communities formed thirty-two per cent. of the total population and represented twenty-six different nationalities. If one included the native-born of foreign-born parentage, over seventy per cent. of the total population was accounted for. With the closing of the Nation to free immigration about 1920, the number of foreign-born in the present population has decreased but the number of those native-born of foreign-born parents is still very great and of unusual variety.

The natural conclusion from the above in relation to religious life is that diversity, already existent from colonial conditions, was greatly advanced. As the tide of immigration flowed, not only were

the churches already existent increased in membership, but new churches and divisions of old churches—new denominations—were established.

In addition to the growth and diversity through European immigration, there has been further growth by natural increase or migration of the Negro population of Pennsylvania. In 1790 the number of Negroes in the State was 10,274; in 1930 there were 431,257. This has resulted in the great growth of the Negro churches already established, and has produced at least seven new denominations in Pennsylvania.

Changes in the Relative Status of Religious Bodies—A survey of the course of development in the religious life of Pennsylvania since 1790 reveals some very striking changes in the relative importance of denominations. The Catholic Church developed in this period from one of insignificance to its present commanding position, while the Quakers, the Moravians, and a number of sectarian groups declined in relative importance, although not necessarily in numbers. The Baptist and the Methodist churches grew from bodies of both numerical and social insignificance to positions of great numerical and social importance. The same was the case with the Jews; their growth in numbers and importance is just as noteworthy. On the other hand the Lutheran, Reformed and Presbyterian churches continued to maintain their positions of significance from colonial days, while the Protestant Episcopal increased its recognized social position and greatly added to its numerical strength.

New denominations were established in this period to take care of newcomers in their own languages and after their own preferences. Outstanding examples were the eastern orthodox churches: there are in Pennsylvania the Rumanian, the Greek, the Russian and the Syrian churches. In addition, there was the establishment of new denominations, either in Pennsylvania or in other places from which their influence spread. Examples of such are the Disciples, the United Brethren, the Evangelical and other minor churches. A hasty examination of denominational beginnings places more than thirty of the 212 denominations in the United States listed in 1926 as having been organized in Pennsylvania, largely if not entirely drawing their organizers from that area. Most, if not all of these, have expanded beyond that limit.

Since the settlement of northwestern Pennsylvania followed that of the eastern portion of the State, and was considerably delayed

because of the Indian depredations, and the settlers were chiefly from the earlier settled part of the State, the racial and religious status of the region was naturally influenced by that of the eastern section.

While not all of the denominations established in the east became established in the western region, some of the adherents of these smaller denominations came into the region, while the others were firmly established and have since grown in numbers and influence.

Today a pronounced religious atmosphere permeates the region. In all of the towns and cities, the various denominations have imposing church buildings, in connection with many of which social and educational facilities have been provided, while the rural sections are dotted with a vast number of small churches. There are also a large number of denominational educational and benevolent institutions which are making valuable contributions to society.

The Catholic Church in the Region—Although, as is also true in the State as a whole, and in the Nation, the Catholic population exceeds that of any other denomination, the establishment of Catholic churches in the region was much delayed due to the scarcity of priests during the colonial period and the early national period.

The first white man to penetrate into these wilds was a Catholic priest, Father Louis Hennepin, Franciscan friar, who had been working in Canada and who came into this region about the year 1677; he returned to Quebec early in 1678 and was appointed by his religious superiors to accompany the expedition of La Salle. When Céleron descended the Allegheny in 1749, he was accompanied by Father Bonecamp, a Jesuit mathematician, who made a map of the route of the expedition.

Catholic priests accompanied all of the French expeditions, and were also stationed at all of the early French forts in the region. Catholic services were held regularly at Fort Duquesne until the fort was taken by the English, and the day following, Rev. Beatty, a Presbyterian minister, preached a Thanksgiving sermon there.

Without doubt the first religious services held in Erie County were those conducted by Friar Gabriel Anheuser, a priest who signed himself "Chaplain of the detachment," and who is officially recorded as being in attendance on the dying Jean Baptiste Texier in the fort at Presque Isle. Texier died July 11, 1753, no doubt having his burial service conducted by that same priest.

It is of record that when the Chevalier Le Mercier brought the French forces under Chevalier Pierre Marin from Marcelona to

Presque Isle Harbor in April of 1753, a log fort with its palisaded enclosure was forthwith constructed west of the mouth of Mill Creek; and that a small log chapel was erected at the same time, presumably within the walls of that frontier outpost. Here were observed the rites of worship of the Catholic church while the French remained.

The second place of public worship naturally was another small chapel which was erected of logs within the fortifications at Fort LeBoeuf within a few weeks thereafter. These were no doubt maintained until the French were driven from the region. A third is believed to have been constructed by them, perhaps of more ample size, just east of Mill Creek, but not far from its mouth, in a village of French and Indians which is credited with being located there.

A Father Whelan was known to be in the region in 1807, and among the Catholic people in Erie in that year was Nancy Gillespie Dickinson, wife of a hotel proprietor. She was a member of the Gillespie family located at Brownsville, Pennsylvania. The United States statesman and one time candidate for President, James Gillespie Blaine, was the grandson of one of the Brownsville Gillespies. Another priest is known to have been in Crossingville, Crawford County, in 1808, and one in Erie in 1820.

Prince Gallitzin, Apostle of the Alleghenies—Demetrius Augustine Gallitzin, prince, priest, and missionary, was born at The Hague, Holland, December 22, 1770. He was a scion of one of the oldest, wealthiest, and most illustrious families of Russia. His father, Prince Demetrius Gallitzin, Russian Ambassador to Holland at the time of his son's birth, had been previously for fourteen years Russian Ambassador to France, and was an intimate acquaintance of Diderot, Voltaire, d'Alembert, and other rationalists of the day. Though nominally an Orthodox Russian, he accepted and openly professed the principles of an infidel philosophy. On August 28, 1768, he married in Aachen the Countess Amalie, only daughter of the then celebrated Prussian Field Marshal von Schmettau. Her mother, Baroness von Ruffert, being a Catholic, Amalie was baptized in the Catholic Church, but her religious education was neglected, and it was not until 1786 that she became a fervent Catholic, which she remained until her death, April 27, 1806.

Little attention was paid to the religious education of Demetrius, who was born and baptized in the Greek Orthodox Church. In his youth his most constant companion was Frederick William, son of William V, then reigning Stadtholder of the Netherlands. This

friendship continued even after Frederick William became King of the Netherlands and Duke of Luxemburg as William I. Almost from his infancy the young prince was subjected to rigid discipline, and his intellectual faculties, trained by the best masters of the age, reached their fullest development. When about seventeen he became a sincere Catholic, and to please his mother, whose birth (1748), marriage (1768), and First Holy Communion (1786) occurred on August 28, the feast of St. Augustine, assumed at confirmation that



Episcopal Church of Our Savior, Domestic Art School and High School, DuBois

name, and thereafter wrote his name Demetrius Augustine. After finishing his education he was appointed aide-de-camp to the Austrian General von Lillien, but as there was no opportunity for him to continue a military career his parents resolved that he should spend two years in traveling through America, the West Indies, and other foreign lands.

Provided with letters of introduction to Bishop Carroll of Baltimore, and accompanied by his tutor, Father Brosius, afterwards a prominent missionary in the United States, he embarked at Rotterdam, Holland, August 18, 1792, and landed in Baltimore October twenty-eighth. To avoid the inconvenience and expense of traveling as a Russian prince, he assumed the name of Schmet, or Smith, and for many years was known in the United States as Augustine Smith.

Soon after arriving at Baltimore, he was deeply impressed with the needs of the church in America. He resolved to devote his fortune and life to the salvation of souls in the country of his adoption. Despite the objections of his relatives and friends in Europe, he, with the approval of Bishop Carroll, entered St. Mary's Seminary, Baltimore, as one of its first students, it having been founded the previous year (1791) by Sulpician priests, refugees from France. On March 18, 1795, he was ordained priest, being the first to receive in the limits of the original thirteen of the United States all the orders from tonsure to priesthood.

In 1788 Captain Michael McGuire, an officer in the Revolutionary Army, purchased about twelve hundred acres of land near the summit of the Alleghenies, in what is now Cambria County, Pennsylvania, and was the first white man to establish a residence within the limits of that county. He brought his family from Maryland and built his log cabin in the valley below the site of the present town of Loretto, in the midst of a dense forest which covered all that portion of the State. His nearest neighbors were fully twenty miles distant. Soon relatives and friends followed from Maryland, established themselves in the vicinity, and formed what came to be known far and wide as McGuire's Settlement, later called Clearfield, the lands lying on the headwaters of Clearfield Creek. Some years after his arrival Father Gallitzin named it Loretto, after the city of Loreto in Italy; but it was not until 1816 that he laid out the town and caused the plan of lots to be recorded in the county archives. Captain McGuire died in 1793, bequeathing to Bishop Carroll four hundred acres of his land in trust for the benefit of the resident clergy who, he hoped, would be appointed to provide for the spiritual wants of his growing colony. He was the first to be buried in the portion of this land set aside for a cemetery, which Father Brosius consecrated on one of his early visits to the settlement.

Father Gallitzin first exercised his ministry at Baltimore and in the scattered missions of southern Pennsylvania and in northern Maryland and Virginia. In 1796, while stationed at Conewago, Pennsylvania, he received a sick-call to attend a Mrs. John Burgoon, a Protestant, who lived at McGuire's Settlement, about one hundred and fifty miles distant, and who ardently desired to become a Catholic before her death. Father Gallitzin immediately started on the long journey, instructed Mrs. Burgoon, and received her into the church. During this visit to the Alleghenies he conceived the idea of forming

there a Catholic settlement. In preparation therefor, he invested his means, considerable at that time, in the purchase of land adjoining the four hundred acres donated to the church, and at the urgent request of the little mountain colony obtained from Bishop Carroll permission to fix his permanent residence there with jurisdiction extending over a territory with a radius of over one hundred miles. In the summer of 1799 he commenced his career as pioneer priest of the Alleghenies, and has been referred to as "The Apostle of the Alleghenies."

His first care was to erect a church and house of logs, hewn from the immense pine trees of the surrounding forest. In a letter to Bishop Carroll, dated February 9, 1800, he writes: "Our church, which was only begun in harvest, got finished fit for service the night before Christmas. It is about 44 feet long by 25, built of white pine logs with a very good shingle roof. I kept service in it at Christmas for the first time. There is also a house built for me, 16 feet by 14, besides a little kitchen and a stable." While the church and house were being constructed, he said Mass for the few Catholics of the settlement in the log house erected two years previously by Luke McGuire, the elder son of the captain. To accommodate the increasing influx of Catholic colonists, Father Gallitzin in 1808 enlarged the log church to almost double its former capacity, and as the population continued to increase, he took down the log building in 1817, and on the same site erected a frame church, forty by thirty feet, which served as the parish church until 1853.

Father Heyden, one of Father Gallitzin's biographers, writes (1869): "What now constitutes the dioceses of Pittsburgh, Erie, and a large part of the Harrisburg new episcopal see, was then the missionary field of a single priest, Rev. Prince Gallitzin. If we except the station at Youngstown, Westmoreland County, where the Rev. Mr. Browers had settled a few years before, there was not, from Conewago in Adams County to Lake Erie—from the Susquehanna to the Potomac—a solitary priest, church, or religious establishment of any kind, when he opened his missionary career. From this statement we may conceive some idea of the incredible privations and toils which he had to encounter in visiting the various widely remote points where some few Catholics happened to reside." As early as 1800, and frequently thereafter, he wrote to Bishop Carroll, begging that one or more priests be sent to share his burdens. And so for more than twenty years he was obliged to perform, unassisted, a work which would have proved onerous for several.

He was not only the good shepherd of his multiplying flock; he was also in a particular manner their worldly benefactor. Following out his idea of establishing a Catholic colony at the place which he named Loretto, and which he made the cradle of Catholicity in western Pennsylvania he, by means of remittances from Germany and loans contracted on the strength of his expectations, purchased large portions of land adjoining the settlement, which he sold in small tracts to the incoming colonists at a very low rate and on easy terms. For much of this land he was never repaid. Moreover, he built, at his own expense, sawmills, gristmills, and tanneries, and established other industries for the material benefit of his flock. In accomplishing all this he necessarily burdened himself with a heavy personal debt; not imprudently, however, for he had received solemn assurances that he would obtain a portion of his father's large estate, as well as his share of his mother's bequest. The Russian Government, nevertheless, disinherited him for becoming a Catholic and a priest, and the German prince who had married his sister squandered both his and her inheritance. In these circumstances, he was compelled, in 1827, to appeal to the charitable public; the appeal was endorsed by Charles Carroll, of Carrollton, who headed the list with a subscription of one hundred dollars; on the list stands the name of Cardinal Cappellari, afterwards Pope Gregory, XVI, who subscribed two hundred dollars. Yet it was not until near the close of his life that the burden of debt was finally lifted. During the forty-one years of his pastorate in the Alleghenies, he never received a cent of salary; he maintained himself, his household, and the many orphans whom he sheltered, and abundantly supplied the wants of the needy among his flock out of the produce of his farm, which by his intelligent method of cultivation became very productive. It is estimated that he expended \$150,000 of his inheritance, a small portion of the amount that should rightly have come to him, but an immense sum for the times in which he lived, in the establishment of his Catholic colony in the Alleghenies. For some years (1804-07) he was rewarded with ingratitude. His actions were misconstrued, his words and writings misinterpreted, his character vilified, his honor attacked, and even violent hands were laid on his person, and all by members of his own flock. But, with the encouragement of his bishop and the aid of the civil courts, he brought his defamers to acknowledge their guilt, for which they voluntarily and publicly made full reparation before their fellow-Catholics in the Loretto church.

For fourteen years after his ordination Father Gallitzin was known to the general public as Augustine Smith. This was the name

which he subscribed to all his legal papers and to his entries in the parish register of baptisms and marriages. But, fearing serious difficulties in the future, at his request, on December 16, 1809, the Pennsylvania Legislature validated the acts and purchases made under that assumed name and legalized the resumption of his real name. Notwithstanding his varied labors, Father Gallitzin found time to publish several valuable tracts in favor of the Catholic cause. He was the first in the United States to enter the lists of controversy in defense of the church; he was provoked thereto by a sermon delivered on Thanksgiving Day, 1814, in Huntingdon, Pennsylvania, by a certain minister who went out of his way to attack what he called "popery." Repelling this attack, Father Gallitzin first published his "Defense of Catholic Principles," which ran through several editions and was the means of many conversions. This was followed by "A Letter on the Holy Scriptures" and "An Appeal to the Protestant Public."

For twenty years Father Gallitzin had labored alone in a vast mission whose Catholic population was constantly increasing; in 1834, when Father Lemke was sent to his assistance and was assigned the northern part of Cambria County as his sphere of action, the parish of Loretto was restricted within comparatively narrow limits. In the meantime Father Gallitzin's reputation for sanctity, the fame of his talents, and the account of his labors had spread far and wide; and it was his deep humility as well as his love for his community that prevented his advancement to the honors of the church. He accepted the office of vicar-general for western Pennsylvania, conferred on him by Bishop Conwell, of Philadelphia, in 1827, because he felt that in that office he could promote the interests of the church; but he strongly resisted the proposals to nominate him for the position of first bishop of Cincinnati and first bishop of Detroit. For many years before his death he lived in the hope of seeing Loretto made an episcopal see, for Loretto was then a flourishing mission and the center of a constantly increasing Catholic population, while Pittsburgh was a small town containing but few Catholics. After forty-one years spent on the rugged heights of the Alleghenies, he died as he had lived, poor. As an evidence of his religious labors in Pennsylvania, it may be stated that within a radius of fifteen miles from the spot on which in 1799 he built his log church there are now no less than twenty-one flourishing parishes, thirty-three priests, and four religious and educational institutions. He was buried, according to his desire, midway between his residence and the church (they are

about thirty feet apart); in 1847 his remains were transferred to a vault in a field nearer the town, over which a humble monument was erected out of squared blocks of rough mountain stone. In 1891, his remains were taken from the decayed coffin of cherry wood and placed in a metallic casket; in 1899, on the occasion of the centenary celebration of the foundation of the Loretto Mission, the rude monument was capped by a pedestal of granite, and this in turn by a bronze statue of the prince-priest, donated by Charles M. Schwab, who also built a large stone church which was solemnly consecrated October 2, 1901.

The Establishment of the Erie Diocese of the Catholic Church— The ecclesiastical jurisdiction of the Catholic Church in northwestern Pennsylvania followed that of the various nations which claimed this territory. During the French occupation, the bishop of Quebec, Canada, exercised at least nominal jurisdiction over this territory. During the English rule, the Vicar Apostolic of London exercised jurisdiction and, following the Revolutionary War, in 1784 the Holy See appointed Father John Carroll, a Jesuit priest of Maryland, as Vicar Apostolic of the Catholic Church in all the United States. In 1789, he was consecrated and became the first American bishop; Baltimore was his diocese, which was co-extensive with the United States. In 1808, Rome erected four new dioceses—Boston, New York, Philadelphia and Bardstown, Kentucky.

This region then became a part of the diocese of Philadelphia. In 1843 the diocese of Pittsburgh was established and northwestern Pennsylvania came under the jurisdiction of the bishop of Pittsburgh, Most Rev. Michael O'Connor. In 1853 the northern section of the diocese of Pittsburgh was separated to create the new diocese of Erie. Bishop O'Connor, of Pittsburgh, at his own request, was made first bishop of Erie. He remained but a few months and was returned to Pittsburgh upon petition of priests and people of that place. Bishop Josue M. Young was consecrated bishop of Erie, April 23, 1854, died 1866; Bishop Tobias Mullen, August 2, 1868, to August 10, 1899; Bishop John E. Fitzmaurice, 1898 to 1920; Bishop John M. Gannon, 1920. From 1866 to 1868, there was no bishop, and in 1898, Bishop Fitzmaurice took over and was in charge during the final illness of Bishop Mullen. The diocese has been fortunate in having always zealous and capable men under whose administration the spiritual needs of the Catholic population have been adequately supplied.

The diocese of Erie is coincidental with the region within the scope of this work, except that it also includes Potter County. Under the able administration of Bishop Gannon, the church has made remarkable progress in the Erie diocese, not alone along religious lines, but also educational and humanitarian lines. The bishop is intensely interested in promoting education, and in the spiritual and material welfare of the youth. For several years he has maintained an active diocesan committee on youth activities of which Rev. Walter J. Conway is director.

To mention all or many of the early churches of the various denominations within the region would be a difficult task, and a work that would warrant a separate volume and, therefore but a few will be mentioned. A Catholic church was established in McKean Township, Erie County, in 1833. St. Mary's and St. Patrick's of Erie were established in 1837. St. Francis in Clearfield was established in 1836. A Catholic church was established in Elk County, at or near what is now Kersey, in 1833. Decker Chapel, located two miles south of St. Marys, Elk County, is claimed to be the smallest church in the United States, and the St. Marys Knights of Columbus have sponsored a campaign to make the chapel a beautiful wayside shrine. The chapel was built as a thanks offering for recovery from an injury in 1865 by Michael Decker, father of Monsignor Decker, and accommodates thirty worshippers. A Catholic church was built at the famous early oil town, Pithole City and dedicated January 21, 1866; when the town collapsed, the building was carefully taken down and rebuilt at Tionesta where it was re-dedicated July 20, 1886. At Tionesta it was a mission of St. John's parish of Tidioute; in recent years it has not been used and has finally been dismantled.

The Official Catholic Directory for 1942 gives the following statistics for the Erie diocese: Diocesan priests, 182; priests of religious orders, 69; total 251. Churches with resident priest, 111; missions with churches, 46; total 157. Stations, 8. Chapels, 19. Colleges, 6. Academies for young ladies, 3. Preparatory school for boys, 1. High schools, 13. Parishes and missions with schools, 48. High school students in study clubs, 5,869. Home for children, 1. Day nursery, 1. Home for boys, 1. Home for girls, 1. Home for the aged, 1. Total young people under Catholic care, 34,417. Catholic population, 141,589.

The Methodist Church in the Region—This church, which has had a great growth throughout western Pennsylvania, is administered

in the region by The Erie Conference of the Methodist Church, with the exception of Clearfield and McKean counties, under Bishop James H. Straughn, of Pittsburgh.

In 1795, ten years after the Methodist Episcopal Church was organized, a surveying party passed through Franklin on its way to Erie. Among them was William Connelly, a young, ardent Methodist, eighteen years of age, who accompanied the party with his uncle, Thomas Reese, deputy surveyor. This region attracted the young man who was born in Philadelphia in 1777, at the Black Horse Tavern kept by his father, Isaac Connelly, a personal friend of Washington. In 1801 or 1802, he, then married, returned to the Oil Creek Valley and located at or near Titusville. In 1809 he removed to Franklin where he became an honored citizen as well as a leading Methodist of the county for more than sixty years.

About the same time William Connelly located in the Oil Creek Valley, Isaac Connelly, his father, located in the eastern part of Allegheny Township, Venango County, as did also Thomas and James Dawson, Andrew and James Kinnear, and John and George Siggins, all devout Methodists. In 1799, two years before the advent of those intelligent Scotch-Irish Methodists to the Pithole region, another Methodist family from Ireland located on Oil Creek about six miles south of the present site of Titusville. It was that of Samuel Gregg whose wife was "converted under the preaching of John Wesley in Ireland where she united with the Methodists." On her arrival at her new home on Oil Creek, Mrs. Gregg embraced the earliest opportunity to invite the Methodist ministers to her humble cabin in the wilderness, which for many years was both their lodging place and sanctuary.

Undoubtedly those pious followers of Wesley worshipped together even before a missionary from the Baltimore conference, which then embraced this region, had come this way. A goodly number of those in the Pithole region and at the Gregg settlement on Oil Creek attended a quarterly meeting at Mumford's on French Creek, some of the company traveling by foot as far as fifty miles. Among that number were Isaac Connelly and George Siggins, who when a lad had been converted under the preaching of Wesley in Ireland. In 1802 these two gentlemen attended a quarterly meeting at Gravel Run below Waterford, where "a great revival spread throughout the whole country."

It was not until 1804 that a Methodist itinerant visited these groups. That was the Rev. Andrew Hemphill who found conditions

most favorable and at once organized a class at Gregg's called Oil Creek (later Pioneer) which was composed of at least three members: John Gregg, Hannah Gregg and Sally Stevenson; also a class at Pithole or in the Pithole region, composed of: Henry Kinnear, George and Jane Siggins, James Dawson, Sr., and Elizabeth, his wife, Thomas and Hannah Dawson, James Dawson, Jr., Phoebe Dawson, William and Mary Kinnear, Andrew and Dinah Kinnear. A third class ministered to by Mr. Hemphill was organized at William Mitchell's whose farm in Venango County bordered the Crawford County line at the Titus settlement now known as Titusville. This third class at Mitchell's proved to be the nucleus for the Titusville Methodist Episcopal Church, organized many years later. Among its members were the Alcorns and William Connelly, already mentioned, who, in the autumn of 1804, served as guide to Mr. Hemphill as he journeyed to Franklin where he had an appointment to preach. As "he was refused the privilege of occupying the schoolhouse, he took his stand under a tree on the common, where he sang, prayed, and then preached to a small congregation, some sitting, and others standing on the grass. This is supposed to be the first Methodist sermon ever preached in that village (Franklin), since so prominent in Methodism."

As late as 1819 these appointments belonged to the Erie circuit, Monongahela district and the Baltimore conference. In 1812 the Erie circuit included the Venango County appointments and continued thus until 1819 when it became a part of the Ohio district of the Genesee conference. Upon the formation of the Pittsburgh conference, by order of the General Conference of 1824, the Venango County appointments became a part of the Erie district, Pittsburgh conference. In 1836, upon the formation of the Erie conference, Venango County became a part of the conference where it has remained ever since, more than a century.

By 1810 the Pithole class ranked as one of the six most prominent appointments of the Erie circuit, as did also that at Mrs. Mitchell's in Venango. The circuit embraced the counties of Erie, Crawford, Venango and Mercer, two hundred miles in all which took four weeks to cover. Quarterly meeting was often held in a barn on Oil Creek. This it would seem, was at Gregg's (Pioneer), which was more centrally located, making it possible for members of distant classes to attend.

The first meetinghouses were the typical log buildings of that period. What is believed to have been the first frame meetinghouse

of the Methodist Episcopal Church in Venango County was erected on a portion of the farm of Thomas Dawson, which had already been used for a burial ground as well as for church purposes. Upon the building of this house of worship it was designated as the "Asbury Chapel," but the appointment was recorded on the conference minutes as Pithole church, a branch of Pithole Creek running nearby. This church was erected in 1821.

Rev. Ahab Keller was appointed pastor of the Franklin circuit in 1833. His appointments for that year show the vast territory he and his associate pastor, Rev. Rouse B. Gardner, had to cover which were as follows: "Franklin, Hazlet's, Brown's, Blood's (Marienville), mouth of Oil Creek (Oil City), Alcorn's, Holeman's, Tionesta, Tionesta Mills (Newton, etc.), Pithole church (Asbury Chapel), Allender's school house, mouth of Dawson Run (below West Hickory), Samuel Henderson's, Tidioute (Joshua Richardson's), Courson's Tavern, Pleasantville, Henderson's—a number in Rome Township, Crawford County, Sugar Creek Lake, Deitz' school house, Plumer's, Sugar Creek, Cooperstown, Herring's, Cumming's school house, Foster's."

Methodist churches were organized at early dates in Erie County as follows: Lexington, in Conneaut Township, 1801; first Methodist church building in the county erected one mile south of West Springfield in 1804; first class organized near Lexington, 1801; first quarterly meeting held south of West Springfield in July, 1810; revival meetings first held in Erie by Methodists, 1810-11, in a log tavern where the Erie Public Library now stands; first class organized in Erie, 1826; a class held meetings in a log schoolhouse in Erie on the east side of French Street between Second and Third streets, in 1826; meetings were held in the courthouse in West Perry Square in 1833; meetings were held in a small one-story frame building on East Fourth Street in Erie, between French and Holland streets, 1833 and later; Erie was made a station by conference in 1834; Erie conference organized in July, 1836; "Wesley Chapel" dedicated January 1, 1839, situated between Peach and Sassafras streets, on the north side of Seventh Street, in Erie; three new classes formed in 1840; two more classes in 1842; ninth annual session of Erie conference held in Erie in July, 1844; in 1852 a committee of the First Church of Erie located the site of Simpson M. E. at the southeast corner of Twenty-first and Sassafras streets, as now called; November 14, 1860, the new \$14,000 brick building of the First M. E. Church of Erie was dedicated; Simpson's new brick structure was dedicated by

Bishop Simpson, June 19, 1859. Numerous Methodist churches were organized in other parts of Erie County at early dates.

The following data are quoted from the first membership record book of the St. Marys Methodist Episcopal Church of St. Marys, Elk County:

"The first sermon preached by a Methodist minister in St. Marys was in March, 1873, by Rev. James Curns, Presiding Elder of the Williamsport District, Central Penna. Conference. He preached in the Presbyterian Church, from the text: 'What is your life?' James 4:14. Among those present was Mr. Benjamin McDowell Hall, who was very much pleased with the service. The following week he said to Mr. Joshua Sykes that he would be glad to have the Methodist minister come to St. Marys regularly to preach, making his home at his, Mr. Hall's house. April 7, Mr. Hall died, and a friend to Methodism was removed from the earth.

"The next Methodist service in the town was August 23, 1878, when Rev. H. V. Talbot, of Ridgway, officiated at the funeral of a child of Mr. Joshua Sykes. This same pastor came frequently from this time on, preaching for a number of months in the Presbyterian church . . . and at the home of Mr. J. A. Dice. Later, McBride's Hall was the place of meeting. The Presbyterian being without a pastor, there were no other Protestant services in St. Marys at this time. After some months the Presbyterians secured the Rev. S. T. Thompson to serve them, and the Rev. Mr. Talbot discontinued preaching in the town. But Methodist services were held occasionally, ministers coming from Brockport, Ridgway and Emporium. To Joshua Sykes' family, residing for many years at Benzinger, four miles east of town, belongs the credit for keeping the cause of Methodism alive in St. Marys, until it was made a regular preaching place in 1895, with the Rev. W. C. Wallace as the pastor."

Joshua Sykes, above mentioned, came to Benzinger Township in the seventies, following the building of the Philadelphia & Erie Railroad. He was in the lumbering business, operating a sawmill. His son, W. L. Sykes, who also became a strong supporter of Methodism in that section, was named after one of the contractors on the line of construction.

At that time there was a large number of English Wesleyan Methodists working around the mines in that section, in whose homes prayer meetings were held. These Joshua Sykes regularly attended and frequently he was the leader.

About 1895, St. Marys, then a town of about fifteen hundred inhabitants, enjoyed a "boom." Within the next five years the population trebled. Obviously, many of the new people were affiliated with the Methodist Church and the movement to start a society there naturally began.

Early in the year 1895, Richard Brooks, who was then pastor of the Emporium circuit, of which Benzinger formed a part, came to St. Marys to interview several families who were desirous of having the services of a Methodist minister. They promised to pay \$300 per year, if one service a Sabbath could be given them. This he reported to W. L. Sykes and to the presiding elder, the Rev. M. K. Foster. Mr. Sykes and family offered to stand by St. Marys, if this could be done, and in March, 1895, the Emporium circuit was divided and a new charge was formed with St. Marys, Benzinger, Beechwood, More Hill and West Creek appointments.

Services at St. Marys were held in Tierney's Hall, but in the middle of the year the people were warned out. They then began to consider seriously the question of a building. W. L. Sykes purchased a plot of ground between St. Marys and Lafayette streets, and from this donated a site for the church to a board of trustees. On this lot a Sunday school room was so far completed that it was opened for services on March 8, 1896, the Rev. E. E. A. Deaver, of Emporium, preaching the sermon. By March, 1897, the auditorium was built, but not finished, when the Rev. G. W. Faus was appointed pastor. The church was completed and dedicated November 14, 1897. The morning sermon was preached by Dr. E. J. Gray, president of Williamsport Dickinson Seminary. The evening sermon was preached by Dr. George W. Corey, of Washington, District of Columbia.

The oldest Protestant parish in Ridgway is the Trinity Methodist Episcopal, its beautiful church being located on Broad Street, replacing the old frame structure which stood on Center Street. The centenary of the parish was held in 1932. In 1832 the Methodists organized with Reuben and Mrs. J. A. Aylesworth, Mrs. Gallagher and daughter, Emily, and Lucretia Gillis as members; no doubt there were others, but this cannot be substantiated, as no complete record can be found.

At that time Rev. Benjamin F. Sedwick and Rev. Abner Jackson were preachers; Rev. G. D. Kinnear came in 1834, and Rev. A. Plimpton in 1835. In February, 1851, Rev. R. Edwards, of Warren, and Rev. S. B. Sullivan, of Youngsville, officiated at the Methodist quarterly meeting held at Ridgway Academy. The Methodist church house was erected in 1873-74, according to Beers' "History of Elk County," during the pastorate of Rev. W. Martin, at a cost of \$8,000 and was dedicated January 31, 1875.

The progress of this church throughout the region generally has been much like that related of certain parts thereof. From an humble beginning, it has developed in membership and influence to the position of importance in the religious life of the region.

The number of pastors in the region is approximately 275; number of churches approximately 450; church membership approximately eighty thousand.

Methodist institutions in northwestern Pennsylvania include the Old People's Home, at Conneautville, Crawford County; the Children's Home, at Sheffield, Warren County and Allegheny College, at Meadville, the first college west of the Alleghenies and north of the Ohio, founded in 1820.

The Presbyterian Church in the Region—Presbyterianism was introduced into western Pennsylvania at an early date. During the late summer of 1766 Charles Beatty and George Duffield, Presbyterian ministers, visited Fort Bedford, Stony Creek, Laurel Hill, and Fort Pitt and passed on through Logstown and Sawcunk to the Tuscarawas and Muskingum country. The following passages, taken from Beatty's diary, give some idea of the purpose and accomplishments of the mission:

"19th, Tuesday. Rode four or five miles to a place in the wood, designed for building a house for worship, and preached but to a small auditory; notice of our preaching not having been sufficiently spread. After sermon, I opened to the people present, the principal design of the synod in sending us to them, at this time; that it was not only to preach the gospel, but also to enquire into their circumstances, situation, numbers, and ability to support it. The people not being prepared to give a full answer, promised to send it to *Carlisle* before our return. . . . This valley of Tuskerora is about thirty-two miles in length; between six and seven miles broad in the middle, and about ten miles wide at the lower end next

to *Juniata* river. There are about eighty-four families living in this valley who propose to build two houses for worship. . . . In the afternoon, being in the open air, we were interrupted by a very heavy shower of rain. . . . After sermon, I went to a house about a mile off, and baptized a child born last night, and returned to capt. Paterson's in the evening."

In a footnote Beatty says:

"It was truly affecting to see, almost in every place on the frontiers, marks of the ravages of the cruel and barbarous



First Presbyterian Church, Greenville

enemy (Indians). Houses and fences burned, household furniture destroyed, the cattle killed, and horses either killed or carried off, and to hear the people relate the horrid scenes that were acted."

No matter how small the group or inadequate the facilities, Presbyterian frontiersmen demanded educated ministers. Princeton College, and, later, the log colleges at Canonsburg and Washington, Pennsylvania, furnished the necessary instruction. Each prospective preacher had to undergo an examination before the presbytery, in literature, Greek and Latin, mathematics and philosophy, and to

preach a trial sermon on an assigned Latin text. The Redstone Presbytery, founded in 1781, frequently conducted trials for prospective ministers.

The following minutes are recorded for Thursday, April 23, 1795:

"Mr. James Adams having offered himself a Candidate for the Gospel Ministry, P.b.y. . . . appointed him an exegesis on the following theme, *Quo modo Sacrae Scripturae probantur esse divinae*. P.b.y proceeded to examine Mr. Adams on the Latin and Greek Languages, the specimens which he gave thereon were accepted as parts of trials."

On June 26, 1799:

"P.b.y appointed Mr. Moorhead to prepare an exegesis on the following theme *quid sit discrimen inter Foedera operum at gratiae* also a Homily on 1. John 4.19 to be brough (t) in at our next meeting."

The Christian ministry on the frontier was truly a labor of love, for not only was the promised stipend low but it was not uncommon for a congregation to be three years or more in arrears on salary payments. One Presbyterian congregation (Congruity, in Westmoreland County) on April 11, 1798, presented a written guarantee to pay the Rev. Samuel Porter, "one hundred and twenty Pounds clear of all deficiency the one half in merchantable wheat at five shillings pr bushel and the other half in Cash." Bids were often received for one-half or one-fourth the time of a pastor. In 1819 the church at French Creek promised \$204 and one hundred acres of land for three-fourths of the time of the Rev. A. Brook, and the congregation of Buchanan took the other fourth of his time at \$50 a year.

Collections in cash and produce were slow and, even though the prejudice against it was strong, the circuit rider was forced into secular business. A large number of Presbyterian ministers, despite the deep-rooted objections of some of their constituents, deemed it necessary to supplement their clerical incomes. After spending half a day debating the question whether or not a minister might have a remunerative secular position the Pittsburgh Synod concluded that he might if absolutely necessary "for the support of himself and family."

The life of the frontier preacher was crowded with interesting and useful service but hedged in by bitter privation. Much of the

time was spent on horseback. The Presbyterians, having the more numerous constituency, served from one to four churches.

The pioneer preacher delivered a forceful message, with the savor of hell-fire and brimstone, flaying mercilessly the baser sins of primitive society. He spoke at cabins, taverns, courthouses, and in the open air. Frequently the opportunity came to answer a heckler or engage in debate with a rival from another denomination. During the year 1806 the Rev. Robert Roberts preached in Meadville at a tavern. It was a bitterly cold night, and while preaching he wore his overcoat. It is related that he said: "If you want honor, it is more honorable to serve God than the devil. If a man want pleasure, he need not go to Satan for it, as he has been a stranger to it for more than five thousand years. If he want riches, were he to sweep hell he could not find a sixpence." At this juncture a response came from a small man sitting in a corner. "Why sir! then money is scarce there as well as here."

In most communities religious services were held long before the erection of church buildings. Denominational consciousness was strong, and zealous laymen would arrange meetings for "social worship" at which the Bible and perhaps a sermon were read and all were asked to join in singing and praying. The guiding spirits in the early Presbyterian meetings were often made ruling elders when a congregation was formally organized. Often several small groups would join in inviting a preacher to serve them. Many of the Presbyterian congregations in western Pennsylvania were organized in this manner.

The log church in some localities was contemporaneous with the earliest buildings. The Laurel Hill Presbyterian Church in Fayette County, erected in 1772, was built entirely with the ax. No nails were used—the clapboard roof was secured by logs and the doors by wooden pins. Small openings in the logs, glazed with paper or white linen oiled with lard or bear grease, served as windows. The seats were of cleft logs set on blocks. The raising of a log church was a gala occasion; the entire community assembled, bringing ox teams and tools to cut and notch the logs. Through the forethought and generosity of some individual, a jug of whiskey was often provided to cheer the workers. The smaller churches were four-sided and each side was a single log's length. In other localities twelve-sided structures were constructed to accommodate the crowds.

In the unorganized frontier community the church was often the principal agency of social control, for it performed many of the func-

tions of the civil magistrates of our own time. One is impressed by the order, system, and fairness in which discipline was administered. If the congregation was Presbyterian, the case was first presented to the local church session. Witnesses were called and interrogated, depositions were placed on file, and the evidence was carefully weighed. Sometimes a definite decision was rendered; often it was decided to defer judgment in the hope that Providence might throw further light on the subject. Knotty problems were referred to the presbytery, or, failing of solution there, to the synod. Each defendant had the right of appeal to the higher tribunals.

The more frequently recurring causes for disciplining local church members were drunkenness, profane swearing, Sabbath-breaking, lying or breach of contract, slander, affairs between the sexes, and disputes over property. Proportionately few cases of theft or crimes of violence were brought before the church session. Generally the system of civil justice was resorted to in such extremes.

Deliberative bodies of various churches have long sought to control public morals by inveighing against the sins of the day and recommending certain standards of conduct. Every moral or political crisis calls for a special pronouncement. Participants in the Whiskey Rebellion were roundly condemned in a resolution passed by the Redstone Presbytery. Those who had an active hand in "burning property, robbing the mail and destroying the official papers of the officers of Government" were not be admitted to the distinguishing privileges of the church until they gave satisfactory evidence of their repentance. The presbytery concluded by expressing its "heartly disapprobation of all riotous illegal and unconstitutional Combinations against the government, the laws or the officers of Government." In 1812 the presbytery again gave its support to a government facing armed foes. In October, 1813, the presbytery of Ohio called upon its members to offer up praise and thanksgiving to God "for the late signal and very remarkable victories, under the Divine auspices, gained by our northwestern armies, both on lake and on land."

The conditions related, of course, pertained to the other denominations in the region during the frontier days, the principal ones in numbers of adherents, besides the Presbyterians, having been the Methodists and Baptists.

The frontier churches could claim only a small proportion of the total population as their adherents. Yet they wielded an influence far greater than their numerical strength would indicate, and many of

the prominent community leaders were numbered among their constituents. The fact that the rank and file of church members were amenable to the discipline of the local congregation greatly enhanced the influence of organized religion.

John Elmer Reed, in his "History of Erie County," after referring to the Catholic services at Erie in 1753, says:

"No record of any other services of a religious character have been found until the memorable one held on Sunday, July 2, 1797, in a clearing in Greenfield Township, at what is now called 'Colt's Station.' About thirty persons assembled and attentively listened to the reading by Judah Colt of a sermon from a collection of Dr. Blair's sermons. The subject chosen for the reading that day, was no doubt inspired by the prevalent unsettled and tumultuous conditions in the county owing to the troubles prevailing over land titles; for we read from Judah Colt's manuscript 'Life': 'This season was one of much business, and, owing to the opposition of adverse settlers, one of much trouble and perplexity. We were compelled to keep from forty to eighty or one hundred men in the service of the company (Population Land Company) to defend the settlers and property. More than once, mobs of men, from twenty to thirty, would assemble for the purpose of destroying houses, and other mischief, some of whom I had indicted, and bills were found against them by the grand jury of the then Allegheny County, the courts being held in the borough of Pittsburgh.' The subject chosen from the book of sermons was therefore most appropriate under the circumstances: 'Let all things be done decently and in order,' 1st Corinthians, chapter xiv, verse lv."

It is likely that other neighborhood services were held from time to time throughout the county, when two or more families would get together and read a sermon, sing a psalm or two, and have prayer; but we have no record of these, nor of other public services excepting the general statements that such was the fact, and that occasional missionaries and itinerant preachers came through the county holding irregular seasons of worship, usually in the open air, in taverns, or other places which were made ready for them.

The next public services which have been recorded, were held in the villages of Erie, Waterford and North East in 1799, when Revs.

Stockton and McCurdy, two missionaries sent out there by the Ohio and Redstone presbyteries, visited the county and preached to the people gathered to hear them. But there were no church buildings for their accommodation.

In August, 1801, Mr. McCurdy and Rev. Satterfield came to Venango Township from the presbyteries above-named, and, gathering a large concourse of people in a chopped place in the woods by a large spring which gushed from under the trees at the foot of the hill below where is now the graveyard of the old Middlebrook church, about a mile and a half north of Lowville, held a service in the open air which was so well received that at its close James Hunter arose in his place and invited "the boys" (as he called them), together and asked them to meet him at a certain place the next Thursday with their axes and dinners. They well knew what was wanted of them, and the following Thursday all were at the spot, and Mr. Hunter said: "The Lord has been mindful of us in this wilderness, and has sent us the gospel by the mouth of one of His servants, and we had no house to meet in, but heard it as you know, under the beech trees in the open air. Now, if we wish to prosper while we build houses for ourselves, we must build one for God." He had selected this spot as it was the center of the township. But as the large hemlock tree which marked the center of the township stood in a wet place, young Mr. Warren suggested going a little north to higher ground, where he would give the church a deed for two acres of land upon which was a fine spring of water. This met with hearty approval, and they went to work, and so heartily did they labor that by night they had completed the first log church, or church of any sort, which Americans had ever put up in Erie County. This was the old Middlebrook Presbyterian Church, on the site of which may still be seen the God's Acre filled with the dust of pioneer heroes who prepared that county for the comfort of those who followed. After a short while a larger log building was built on the site of the first, which endured until the Wattsburg church had absorbed its members. Wood from the original timbers of this pioneer church was selected and made into a replica of the Middlebrook church, which was bequeathed to the Erie Public Museum, where it has been preserved.

After organizing a congregation of eighteen members at Middlebrook, Messrs. McCurdy and Satterfield went to Colt's Station and North East, where they were joined by Revs. Tate and Boyd, also of the same presbyteries. At North East the four held a public service on September 27, 1801, at the homestead of William Dundass, at

which were some three hundred persons. A congregation was organized then and there by the name of the "The Churches of Upper and Lower Greenfield."

On October 2, 1801, the Erie Presbytery was established, covering the territory between the Ohio and Allegheny rivers and Lake Erie, extending into Ohio. Its first meeting was at Mt. Pleasant, Beaver County, April 13, 1802, with seven ministers in attendance. They received requests for religious services from the congregations of Upper and Lower Greenfield and from Middlebrook; also a request from Presque Isle. Revs. Satterfield, McCurdy and McPherin were designated as missionaries to serve in Erie County.

The first regular preacher in the county was Rev. Robert Patterson, who was received into the Erie Presbytery on September 30, 1802, and accepted the call of "The Churches of Upper and Lower Greenfield," entering upon his work there December 31, 1802. He seems to have lived at North East. In 1804 a small log church was built in Springfield Township, Mr. Patterson preaching at Springfield, North East and Middlebrook for a time.

In October, 1805, Rev. Johnston Eaton, a young minister, who had been licensed by the Ohio Presbytery on August 22, 1805, to preach the gospel, came to Erie County. His early education had been completed in the theological seminary of Dr. John McMillan conducted in a log house at Canonsburg, Pennsylvania. He remained there but a short time, and left to spend the following year in southern Ohio, traveling for his health. In 1806 he returned to Erie County, preaching mostly in the barroom of a small log tavern, near the mouth of Walnut Creek, which was then kept by Captain Richard Swan. No doubt some sort of congregational organization was formed during this season, although there is no sure record of it, except from the fragment of his old journal which states: "Preached three months in the congregations of Fairview, Springfield, and Millcreek, beginning July, 1806, at ninety dollars per quarter."

In 1807 he married Eliza Canon, of Fayette County, Pennsylvania, a niece of Colonel John Canon, the founder of Canonsburg. Returning with her, on horseback, they settled on a tract on the west banks of Walnut Creek, their little log cabin being built a few rods north of the top of Walnut Creek hill on the Ridge Road. Here it is related that a bear climbed the bank of the creek one morning and took away one of the minister's pigs before the startled eyes of his wife.

Rev. Johnston Eaton was the first minister of any denomination to be ordained in Erie County, the ceremony taking place in the barn of William Sturgeon which then stood in the southeast corner of Church and South streets, Fairview borough now, on June 30, 1808. Prior to this time he had organized a congregation called the Fairview Congregation, having for its first elders Andrew Caughey, George Reed and William Arbuckle, and with but twenty-five members. In 1810 this congregation built a log church structure on the high bank opposite, and across the road from the place where later was built the Mayside Hotel, near the mouth of Walnut Creek. In 1806, Rev. Eaton also organized a congregation of the Presbyterian faith at Springfield out of the attendants upon the meetings held there in 1804 by Rev. Robert Patterson. The first elders of this congregation were Isaac Miller, James Blair and James Bruce, the congregation having thirty members.

Rev. Eaton seems to have, for a time at least, served the religious needs of nearly the whole county, preaching sometimes at Erietown, North East, Middlebrook, Waterford, and other places. During the War of 1812, he acted as chaplain to the troops at Erie, and on February 14, 1815, the Erie Presbytery granted to Erie one-third of the services of Rev. Eaton for one year; and on February 24, 1815, Judah Colt, Joseph Arbuckle and Samuel Hays were elected trustees. On May 13, 1815, at the home of Robert Brown, Samuel Hays was appointed treasurer. Thomas Stewart was directed to make collections for the borough of Erie, and William Saltsman for the county. At this time arrangements were also made to use the house of Colonel Miller on Peach Street, north of Fifth, known as "The Barracks." It was during the month of February, 1815, that this congregation was regularly organized by Rev. Eaton, who continued as its stated supply until 1823. For two years his time was equally divided between Fairview, North East and Erie; later between Fairview and Erie, and a little later practically confined to Fairview. Afterwards, the old barracks becoming unsuitable to hold services in them, services were held for a time in the courthouse in West Perry Square, until the authorities withdrew their consent, when Judah Colt built a building for them on the west side of Sassafras Street between Sixth and Seventh streets, becoming known as "The Old Yellow Meeting House." Around this building the bodies of its members were buried, and in it Rev. David McKinney preached his first sermon on October 24, 1824, and was ordained in it on April 13, 1825, being the first regular pastor of this congregation, which later was to be known as

the First Presbyterian Church of Erie. So it seems that Erie had a Presbyterian congregational organization with official heads in 1815; but as early as 1808, Erie Presbytery granted supplies to "Upper Greenfield, Middlebrook, Waterford and Erietown," and in 1809 received a report that none of these posts could support a pastor. By inference then, we must conclude that, although the congregational record does not enlighten us, a congregation existed at Erietown prior to 1808 which developed into the First Presbyterian Church of Erie, as Mr. Reed, author of the "History of Erie County," says.

From these early beginnings, Presbyterianism has had a steady growth in Erie County, and throughout the region generally.

Within the region embraced in this work, there are approximately 225 Presbyterian churches, 170 ministers and a church membership of about fifty-two thousand.

A Presbyterian institution of western Pennsylvania is the Washington and Jefferson College, at Washington, which was formed by a union of Jefferson College, chartered in 1802, and Washington College, chartered four years later. The united college was chartered in 1865. The initial organization, from which the later institutions developed was Washington Academy, founded in 1787.

The Lutheran Church in the Region—The first Lutherans in the region were nearly all Germans, or people of German extraction. They settled in considerable numbers in what is now Westmoreland County before that county was formed in 1773. Their records were written in the German language almost exclusively. Fifty or more years later these records fell into the hands of English-speaking people who were unable to translate them, and who therefore unfortunately did not preserve them.

People of this faith settled early in Erie County also. The German pioneers in the region were of the Protestant faith, and most of them adhered to the Evangelical Lutheran denomination, and brought their German Bibles with them. Among the names associated with the earliest of these settlers were the Riblets, Wagners, Ebersoles, Browns, Stoughs, Langs, Zimmermans, and Kreiders, from 1801 to 1805; later were the Warfels, Mohrs, Weigels, Metzlers, Bergers, Brennemans, Geists, Zucks, and others. Soon after they settled, they besought the Lutheran Synod of eastern Pennsylvania for aid in establishing the gospel in their neighborhoods, deploring their situation "to do without sermon, baptism, catechetical instruction and the Lord's Supper," and desiring a minister to be sent to them occasionally, at least.

The first record book of St. John's Evangelical Lutheran Church in Erie was begun September 1, 1811, showing there was even then some sort of congregational organization of that church in existence in that county, and evidencing that services had been held prior to that time. At the laying of the corner stone of that church, on Ascension Day, 1861, it is stated that a history of the congregation from 1808 to 1861 was placed in the corner stone. It is believed that Rev. Muckenhaupt was one of the first traveling missionaries of the denomination who labored in Erie County, inquiries concerning him being instituted in 1811, he being understood to be preaching in Crawford County at the time. Others who followed were Rev. Mr. Scriba, 1811; Rev. Mr. Sackman, 1813; Rev. Mr. Rupert, 1814; Rev. Carl W. Colsen, 1815, who resided at Meadville, and served Erie too. Rev. C. F. Heyer came in 1817, where he labored for a year. Rev. Rupert returned in 1819, and Rev. Mr. Heilig was there about 1832, and is believed to have been the first resident Lutheran minister in the county.

St. John's, of Erie, probably lays claim justly to being the first Lutheran congregation in the county. Its first building was erected and dedicated August 8, 1842; the second, a brick structure, on September 14, 1862. St. Paul's German Evangelical Lutheran Church was organized about 1850; Luther Memorial, the first English Lutheran Church in Erie, in 1861. There are several other Lutheran churches in the city, and the denomination also has churches at Drakes Mills, Girard, McKean and North East.

Lutheranism at Erie is vitally identified with a very benevolent undertaking in the establishment and operation of the Lutheran Home for the Aged, which opened on March 1, 1906, at No. 2201 Sassafras Street. The building contains fifty rooms, and houses many aged persons whose circumstances require home, care and maintenance.

There were but few of the Lutheran faith in Venango County before the political unrest in Germany in the 1840s. Sometime during that decade the first Lutheran Church in Venango County was organized at Dempseytown, by the Rev. H. Weicksel, a missionary of the Pittsburgh Synod, as the Trinity Evangelical Lutheran Church of Dempseytown. The first church, a simple frame structure, was erected on the Titusville Road near Dempseytown, but later a larger and more attractive building was erected in the village proper. At first the congregation was connected with the mission at New Lebanon, Mercer County, but later the pastors of Franklin held services

at Dempseytown. One of the pioneer members of this church was John Benninghoff who became prominent in the early days of the petroleum industry and the robbery of whose home has been related in a previous chapter.

In one of his missionary tours the Rev. Henry Weicksel visited Franklin in July, 1851. His preaching resulted in the organization of a congregation, which was formally effected on October 25, 1851, under the title of Grace Evangelical Lutheran Church. A lot for church purposes was secured at once. The erection of a church began the following year, 1852, and the building was formally dedicated December 8, 1861. The Rev. Brenneman and Rev. S. M. Kuhns officiated at the dedication. It embraced twenty members. The Rev. Weicksel continued his services for some years but they were conducted at irregular intervals. Such irregularity did not make for progress, so the services were discontinued, but were resumed in 1859. The congregation enjoyed a steady growth, and in 1885, a fund for a parsonage having been accumulated, it was decided to seek for a new and larger site. A lot was purchased at the corner of Eleventh and Buffalo streets, on which the new church was erected, the Rev. J. A. Kunkelman, D. D., laying the corner stone on July 25, 1886. The minister having enjoyed the longest pastorate was the late Rev. W. G. de A. Hudson whose services extended from 1902 until his death in 1920. For a period of twelve years, the author and his family were neighbors of Mr. Hudson for whom we retain most pleasant memories. He was a very kindly gentleman always much interested in the youth, and was very kind to our children, who were also very fond of him.

There are in Erie County, twenty Lutheran churches; in Warren County, seven; in McKean County, nine; in Crawford County, five; in Forest County, one; in Venango County, five, one of which, Zion Lutheran Church, in Oil City, is a Swedish congregation; in Clarion County, fifteen; in Jefferson County, fourteen; in Elk County, five; in Mercer County, ten, one of which is a Slovak congregation; in Clearfield County, twenty-two, one of which is a Slovak congregation, and in Cameron County, four, a total for the region of 117 churches. There are ninety-four Lutheran ministers in the region, and the number of confirmed members is 37,561.

Lutheran institutions in the region, in addition to the Erie Home for the Aged, in Erie and Thiel College, in Greenville, each of which has previously been mentioned, include the Bethesda Orphans Home in Meadville.

The Protestant Episcopal Church in the Region—The first Episcopal Church established in the region was Christ Church in Meadville. This and other parishes were formed in 1825, when the Rev. Charles Smith was sent out by the Society for the Advancement of Christianity in Pennsylvania to work in Meadville; Franklin and Mercer. The Rev. Mr. Smith, with the assistance of the Rev. Benjamin Hutchins, later instituted work and churches in Erie and Waterford.

The church in this area was originally a part of the diocese of Pennsylvania, later of the diocese of Pittsburgh. In 1910 the diocese



Grace Episcopal Church, Ridgway

of Erie was organized, and the Rt. Rev. Rogers Israel was consecrated the first bishop. He served until his death in 1921. He was succeeded as bishop by the Rt. Rev. John Chamberlain Ward, D. D., who retires in June, 1943.

The Episcopal Church in the diocese of Erie is characterized particularly by a strong missionary spirit, both for its own rural and city mission work and for the work of the church everywhere in the world.

It is possible that the services of the Protestant Episcopal Church were held in the region before 1825, but no record can be found of any before that time. That was the year that Anderson's Furnace

was established in what is now Clinton Township, then Scrubgrass, in Venango County. At that time Episcopal services were held in the old log community church by the Rev. William G. Hilton from Butler. It was also in January, 1825, that John B. Wallace induced the Rev. John Henry Hopkins, of Pittsburgh, to hold Episcopal services in Meadville and from there missionaries, it is said, came to Franklin, who effected an organization that same year. In 1826, the vestry consisted of George Power, M. J. Crary, John Evans, George Brigham, James Kinnear, John Rynd, John Fetterman, David Irvine, Myron Park, William Parker, Samuel Bailey, Armstrong Duffield, Alexander McCalmont, and John J. Pearson.

On April 24, 1827, Sarah McDowell for the sum of \$1.00, sold to the warden and vestry, St. John's Church in Franklin, Lot No. 25 on the plan of said town, located on Buffalo Street, she being anxious to promote the establishment of the Church of Christ in Franklin. That same year the parish began to erect a brick edifice, but after the walls were up and roof on, work was suspended on account of lack of funds. And it was not until 1834 when the Cumberland Presbyterians entered into an agreement with the Episcopalians to finish the building for the use of it for six years, that anything was done. The work was accomplished though the Episcopalians furnished most of the means.

Though the Cumberland Presbyterians were at first successful, in a few years their work was at an end. After they retired, the improved Episcopal building became silent and inert. In 1851 the parish was reorganized with regular services every three weeks. This lasted but a short time. But in 1862, after an increase of the population, due to the oil excitement, Franklin became a mission station with other points in the oil regions. However, by 1865, Franklin ceased to be a mission and for the first time sent representatives to the diocesan convention, two of whom were James M. Bredin and H. Philip Montgomery. A new church building was dedicated on Easter, April 21, 1867. It became a fine church through rich and generous gifts, which included a rectory. But in February, 1900, a fire originating in the organ chamber, destroyed both. The parish house was restored at once, and services were held in the courthouse until Easter, April 7, 1901, when the present church was opened for services. On September 24, 1900, the rector, the late Rev. Martin Aigner, assumed his duties as pastor and for thirty-five years was the honored rector of St. John's parish of Franklin.

In 1861, services for Episcopalians were held in Oil City by the missionary at St. John's in Franklin who also held services at Reno.

These continued and February 20, 1866, an organization was effected with the Rev. Marcus A. Tolman as chairman and George A. Shepherd as secretary. In the following August, a call was extended to the Rev. R. D. Nevius, of Mobile, Alabama, for full time. He accepted and became the first rector of Christ Church, Oil City. Services were held in Bascom's Hall, and later in Excelsior Hall with seats free for all. On February 9, 1870, property was acquired and a frame building erected which was consecrated January 25, 1871. In 1885 another site was acquired and the present church building erected thereon was opened for service on April 10, 1887. The old building was sold to the Reformed Presbyterians.

On August 26, 1870, the corner stone of St. John's Protestant Episcopal Church of Rouseville was laid. The church was dedicated January 22, 1871. After the membership had largely gone elsewhere upon the decline of the oil industry, this church building was removed to Bradford.

The following excerpt, taken from Deed Book O, page 83, in the recorder's office at Franklin, is interesting inasmuch as no one appears to remember any of the circumstances: June 28, 1855, "Thomas Moffitt and Eleanor, his wife of Oakland Township, from a desire to promote the honor of God and the good of His Church and people and partly in consideration of certain monies—to the Corporation known as 'The Society of the Protestant Episcopal Church' for the advancement of Christianity in Pennsylvania" donated eleven acres and forty perches "for the purpose of a Church Lot Burial Ground, Parsonage and Glebe for a congregation of the Protestant Episcopal Church embracing and being governed by the doctrines discipline and worship of the said Church and in Unison with its Convention. The use of the Parsonage and Glebe to belong to the Missionary Minister or Rector of said congregation for the time being . . . Should there cease to be a desire for an Episcopal Church in Oakland township, the use of the land with appurtenances shall belong to the nearest Episcopal Congregation for the benefit of the Missionary minister or Rector." In 1862, Eleanor Moffitt, daughter of Thomas Moffitt, became the wife of John W. Steele, the celebrated "Coal Oil Johnny."

There are now in the region fifty-two Protestant Episcopal churches; thirty-one clergy, and 12,003 baptized persons and communicants. The denomination has two institutions in the region. The St. Barnabas House by the Lake, at North East, is operated by the St. Barnabas Brotherhood and is a free home for destitute and incurable men and boys of all creeds, colors and nationalities. The Ball

Home, at Erie, is operated by the Cathedral of St. Paul and is an institution for the care of the spinster aged communicants of the church.

The Baptist Church in the Region—The Baptists, unaided by eastern organizations and unhampered by rigid requirements concerning the licensing and ordination of ministers, developed a native leadership. It was customary to wait upon the Lord to see whether anyone would be divinely inspired to exercise a public gift such as singing, praying, exhorting, or preaching. The frontier Baptist preacher had to have a remunerative avocation as there was no assurance of regular support from the congregation.

In 1785 David Philips acquired a 390-acre farm near the site of the Peters Creek Baptist Church in Washington County. Two years later he was called to preach. The initial pastor of the First Baptist Church of Pittsburgh was a glassworker.

The Baptist denomination appeared in Erie County early in the nineteenth century. The Baptist congregation at Lowrey's Corners, in Harborcreek Township, organized in 1822, is believed to have been the first one in the county. It originated in the Hoag schoolhouse until their building could be provided, but it has not survived.

Other Baptist congregations were organized: in Springfield Township in 1826, building its church in 1833 on the Ridge Road, about two and a half miles west of East Springfield; at Erie in 1831; in the eastern part of North East Township at an early date, succeeded by another built on the Buffalo Road a little way east of North East village in 1832; at McLane, in 1838; West Greene, in 1848; at Wattsburg in 1850; the Elk Creek Baptist Church in Franklin Township, in 1867; a Freewill Baptist Church in Waterford Township in 1832; at Wesleyville at an early date, and in Erie, the Emanuel Baptist, Wayne Park, First German Baptist, Second Baptist, and the Swedish Baptist.

As far as can be ascertained, services of the Baptist faith in Pleasantville, Venango County, were held shortly after the arrival of Aaron Benedict in 1821. These were conducted in a schoolhouse erected by Mr. Benedict in 1823 east of the village, evidently by the zealous laymen who composed the first membership. Measures for the organization were soon taken which was completed with the following membership: John Tennent, a lineal descendant of Rev. William Tennent, founder of the Log College (Presbyterian) in Bucks County, Mrs. Tennent, Mrs. David Copeland, Aaron Benedict and

Mrs. Benedict, and Mrs. Ira B. West. The first minister was the Rev. M. Blake, while the Rev. E. M. Miles was his successor. Rev. Samuel Miles served in this capacity from 1838 to 1842. Later pastors were the Revs. John Hicks, George Spratt, Wilcox, W. B. Bingham, Joel Green, Haskell, Willoughby, Davis, Hurlburt, Brasted, Trowbridge, and Pierce. Since the retirement of Rev. Mr. Pierce, November 7, 1875, there has been no pastor although a nominal organization was sustained for many years. Among additional members were the families of Austin Merrick, Hon. Manley C. Bebee, and those of William and Francis Pritchard, of Oakland Township, natives of Wales, who brought their families by wagon to attend the Baptist Church, a distance of nineteen miles or more.

July 27, 1847, Aaron Benedict and Louise, his wife, donated "a certain piece of land" containing two acres to the Allegheny Baptist Church, on which a fine frame building was erected in 1848 and dedicated January 6, 1849. This was sold by the "Oil Creek Baptist Association of Erie," in 1898. This church building, one of the historic landmarks of Venango County, is located on Route Twenty-seven which passes through Pleasantville. In the "Articles for the incorporation of the Allegheny Baptist Church in the Borough of Pleasantville" written March 22, 1850, the "Title of 'The Allegheny Regular Baptist Church of Pleasantville,' " is given.

The Freewill Baptists organized a society near Canal Center, Canal Township, Venango County, as early as 1827. For several years meetings were held in a schoolhouse and private residences, but in 1832 a frame edifice was built about one-half mile east of Canal Center, on the Cochran Road. This answered all purposes until 1870, at which time a new church was built and was formally dedicated. Rev. J. H. Lamphier, who established the church, served as minister for many years.

Plum and Troy Baptist Church was established April 2, 1853, with seven members and services were held regularly for many succeeding years. The Freewill Baptist Church of Jackson Township, two miles north of Cooperstown, was built in 1850, upon land given by Samuel H. Small. The organization was formed by Rev. Collins, May 26, 1835.

The Dempseytown Baptist Church was organized August 19, 1865, by five members of the Breedtown Church. It was recognized as a separate organization June 12, 1869. On January 20, 1871, Isabelle Dempsey, for \$5.00, sold three-fourths acre of land to "the religious denomination known as the 'Baptist Congregation' of Oak-

land Township." On August 24, 1875, the church building was dedicated. The congregation has long since been disbanded and the church building taken away.

The Rouseville Baptist Church was organized March 26, 1871, and recognized April 18 of the same year. The church building was dedicated December 24, 1871. But two pastors were called, the Rev. M. B. Sloan and Rev. J. P. Stephenson. Through decrease of population the organization was disbanded and the church building sold to the Masonic Order. This building is still standing on the main thoroughfare between Oil City and Titusville, Route 8.

The First Church of Salina originated in a protracted meeting held in April, 1874, by Rev. J. L. Bailey, which resulted in sixty conversions. The organization occurred June 21, 1874, Rev. R. H. Austin officiating. Mr. Bailey was installed the first pastor, July 14, 1874. The frame church building erected through the efforts of a building committee composed of Mrs. L. D. Barr, James Wigton and H. J. Sayers, was dedicated in October, 1876. For many years the church was without a pastor before it was disorganized. The church was sold and remodeled for a dwelling house. It is still standing at a corner bordering the Lakes to Sea Highway.

It was in November, 1863, that the First Baptist congregation in Oil City met in the Third Ward, with but three persons present: Rev. Cyrus Shreve and two ladies. On June 26, 1864, Rev. J. L. Scott began preaching in a house on Seneca Street, which was purchased by the congregation, October 8, 1864, for \$1,000, from Joseph Peters and Adaline, his wife. The first Sabbath school was opened July 10, and one week later, July seventeenth, an effort was made by twenty-seven persons to organize the church properly. But the health of the minister failing soon after produced a period of inactivity for some time. The trustees on December fifth sold the church property for \$1,336.72.

On March 1, 1866, a few met at Dr. J. D. Baldwin's, where J. D. Baldwin, S. A. Boyer, Robert Lowrie, R. B. Fulton, and Andrew Cone were chosen trustees, to whom a charter was granted November 30, 1866. February 11, 1867, the church was organized with twenty-one members. Rev. W. W. Meech was called at a salary of \$1,200 per annum. By August fifteenth of the same year the congregation was officially recognized by a council embracing representatives from Titusville, Cherry Tree, Spartansburg, Franklin, Corry, and Conneautville, which convened for the purpose, while on the sixth of the

following month it was admitted to the Oil Creek Baptist Association, then sitting at Warren, Pennsylvania.

The society was now founded, but its career began so precariously that after Rev. Meech's resignation, November 25, 1867, they had to depend on aid from the State association. Up to September, 1869, twenty-one new members were added, and during Rev. E. F. Crane's pastorate, which began May 16, 1868, a lot was secured and steps taken to erect a church. On August 6, 1869, Julius Davis and Charles Williams were elected deacons. After the arrival of Rev. J. W. Spoor, May 8, 1870, Rev. Crane having been obliged to resign on account of ill health, the church building was taken up. This was completed in September, 1871, at a cost of \$13,000. The church building was dedicated on the fifteenth of October. Not long after a fine new organ was secured through Colonel Fox, an experienced organ builder. On May 21, 1873, the Woman's Missionary Society was organized by Mrs. J. D. Herr, wife of the pastor. In 1884, during the pastorate of Rev. Dillingham, the Baptist Social Union was organized. The church continued to prosper and, by 1888, there had been added to the church 796 new members and funds raised to the amount of \$89,108.84.

In the early morning of January 4, 1920, this church building was burned to the ground. In its belfry was a "town clock," greatly appreciated by Oil City residents, who deeply regretted its destruction. Through the efforts of Homer James, C. W. Gleason, T. A. McCracken, Robert Lowrie (son of the Robert Lowrie to whom the charter was given), W. T. Ebersole, E. E. Bailey, and J. W. Isherwood, a choice brick building, costing about \$125,000, was erected at the corner of West First and Orange streets, which was dedicated June 27, 1926. Among those who had a part in the dedication were: the pastor, Rev. B. C. Barrett; Rev. Dr. Massey, of Tremont Temple, Boston; and Rev. C. Wallace Petty, of Pittsburgh; the historian being F. S. Kitchell.

The first regular Baptist Church of Franklin had its beginning in December, 1866, when regular preaching was inaugurated at Hanna's Hall, by Rev. S. Williams, D. D. Among those loyal Baptists who worshipped there were two who were to become internationally known through the oil industry—John D. Rockefeller, Sr., and General Charles Miller. In the spring of 1867 the society secured the old court room and in the summer of that year preliminary measures were taken toward effecting an organization by the election of D. W. Morgan as clerk. A council of representatives from adjoining

churches convened in the United Presbyterian Church on Elk Street on July 30, 1867; and, after the reading of twenty-three letters from almost as many different societies, they were duly constituted a separate organization. James Bryden and Charles Miller were elected and ordained deacons. The New Hampshire confession of faith was adopted and the new organization was admitted to French Creek Association. Rev. John Owens, of Pittsburgh, was called as first pastor.

During the pastorate of Rev. Thomas Seyse, who resigned April 1, 1870, a lot for church purposes was secured on Liberty Street and the society received civil incorporation. During the following year measures were undertaken to secure a church edifice. In September, 1873, a chapel was completed. On the twenty-first of the same month the semi-centennial of the French Creek Association was celebrated there. During the following year the membership was nearly doubled by a revival, Revs. A. C. Williams and R. H. Austin, pastors, and a church building was decided upon and dedicated November 27, 1874, Dr. Evarts, of Chicago, preaching on this occasion. During the pastorate of Rev. Fred Evans, who was installed December 6, 1873, and remained eleven years, the membership was increased from eighty to three hundred; a lot adjacent to the church property was purchased and a commodious parsonage erected thereon.

This church, at one time one of the most widely known in northwestern Pennsylvania, has had a remarkable growth, due largely to successful revivals from time to time. The material prosperity has been great also, due largely to the generous munificence and deep interest of the late General Charles Miller and Hon. Joseph C. Sibley. The Sunday school built up under the superintendency of General Miller was for a time one of the largest in Pennsylvania.

The Evangelical Church in the Region—The Evangelical Association founded congregations in the region early in the nineteenth century. In Erie County they were: at Salem, in Fairview Township, at Erie, Mt. Nabo, Fairview Borough, all in 1833; also at Emanuel in Summit Township in 1838 and at North East Borough in 1870, and one at Sterrettania at an early date.

The Valley Church of the Evangelical Association of Richland Township is believed to be the oldest of that denomination in Venango County. It was organized in 1834 or 1835 at the Weaver Schoolhouse by the Rev. Solomon Altamouse. The first leader was Samuel Weaver and the first members were Joseph and Sallie Weaver,

Andrew and Catherine Weaver, Thomas Weaver and Samuel Weaver. The Starr, Bushey and Mitchell families united with the organization soon afterward. The first church was built in 1840 on ground given by Andrew Weaver. The second church building was erected in 1865. David Weaver donated the land upon which it stood. This was removed in 1889 and was replaced by the present frame building. Another congregation of this denomination in Richland Township is Zion Church. The first church was erected in 1844 on an acre of ground given for that purpose by Samuel Dreibelbis. The present church building was erected in 1875. The present burying ground was given in 1850 by Joseph Disler and Daniel Martz.

Oakland Evangelical Church, a mile northeast of Dempseytown, was erected in 1851 and dedicated in 1852. Prior to this Rev. Bucks and Rev. Miller had preached there in 1836; D. Long, in 1838; Samuel Heis, in 1839; Henry Heis, in 1840; and others of the preachers in charge of Venango circuit, then embracing all the churches of this denomination in Venango County. Sugar Creek circuit was formed in 1853 and, in 1879, the name was changed to Dempseytown. The organization was disbanded some years ago and the church building removed.

Zion Evangelical Church, Oakland Township, popularly known as Lamey Church, was organized in 1863 by Rev. L. M. Boyer. The first class leader was J. Lamey. Among the original members were the Lamey and Masterson families. The church building was dedicated January 24, 1869, by Rev. J. D. Hollinger. An organization had been formed in this neighborhood many years before with William Masterson as leader. This was disbanded before the present organization came into existence.

Immanuel Church, of the Evangelical Association, at Linesville, Pinegrove Township, was organized in 1860. A log building was at once erected, then a frame structure in 1864, and the present building in 1882.

The Heckathorne Church of this denomination was organized in 1846 with Henry Heckathorne as first class leader. Among the first preachers were Revs. Foy, McClain, Dick Huniger, Rosenberger, Crossman, and Pfifer. The frame church building was erected in 1865. The burial ground adjoining was set apart for that purpose by Henry Heckathorne in 1846. Interments had been made there previous to that date, but the earliest inscription upon a tombstone bears the date 1848.

The English Evangelical Church, situated in Barkeyville, Irwin Township, was organized in 1865 by W. Davis, L. M. Boyer, J. Crissman, J. Woodhall, and W. Brown. The original members were: Jacob Latchaw and wife, I. S. Yard and wife, Robert Jones, George Jones, Keller Jones, William Jones, G. W. Hobough and wife, Sidney Latchaw, Sarah and Lizzie Latchaw. The congregation held services for thirteen years in the log church building belonging to the congregation of the Church of God. In 1878 they erected their present frame building. It was dedicated the same year and the dedicatory sermon was preached by Bishop Rudolph Dubs, of Cleveland, Ohio. The first pastor was Rev. J. Myers.

Mt. Olive Church of this denomination was organized in March, 1882, in Mineral Township, by Rev. M. L. Weaver, then of the Barkeyville circuit. A frame church was built at Raymilton in 1882. Rockland Evangelical Chapel was built in the autumn of 1884 and was dedicated February 15, 1885. The class was organized in 1885 by Rev. T. Bach with twenty members, of whom William Domer was the first leader. The preachers on the Venango circuit had been accustomed to preach in the Domer Schoolhouse many years previously.

Hebron Church of this denomination, in Victory Township, is successor to the site formerly occupied by one of the oldest Cumberland Presbyterian churches in this part of the Allegheny Valley. Rev. George Brown, then of the Dempseytown circuit, held the first services in the winter of 1868, at the schoolhouse near Springville. A revival meeting was held, resulting in the formation of a class of nineteen members. The frame church building on the Pittsburgh Road was erected in the autumn of 1870. The ground is occupied under lease from Richard Major and Andrew Shiner, trustees of the Cumberland Presbyterian Church.

Calvary Church, Evangelical Association, of Oil City, had its origin in a company of adherents of what was known as the Albright faith, who, in 1866, called the Rev. W. C. Davis, of Pittsburgh, to hold services. He responded and after a protracted meeting in Lee's Hall during the winter following an organization embracing forty members was effected. Among these were many who had worshipped with the Methodists. Rev. Davis was placed officially in charge of the mission by the Pittsburgh Conference of Warren, Pennsylvania, in 1867. Rev. P. W. Plotts had charge of the mission the second year and an attempt was made to erect a church; he was succeeded by Rev. G. W. Brown, under whom a church was erected on First near Short

Street. It was dedicated October 31, 1869, by Rev. T. G. Clewell, and later was enlarged. In 1902 the congregation sold their first property and purchased the old Lutheran Church across First Street, which they occupied as a place of worship until 1914. In that year the old church was removed and the corner stone for a fine new brick structure was laid. In March, 1915, this new church was dedicated. Adjoining the church is a parsonage in keeping with the church.

The first minister of the Evangelical Association to preach in Franklin was the Rev. J. H. Bates, in March, 1870, at Hunter's Hall on Elk Street near Thirteenth. This was followed by a protracted meeting of ten days' duration, in which he was assisted by Rev. G. S. Domer. Prior to this the only members of the town were J. A. Rossman and wife. At the next session of the Pittsburgh Annual Conference, Rev. J. D. Domer was appointed missionary, his charge embracing Oil City also. He preached his first sermon April 24, 1870, in the old courthouse. Thereafter he held services in what was known as the "Old Academy property," which was rented from the school authorities of the city. The membership during this year consisted of eight persons, made up from the families of the presiding elder, the Rev. J. D. Hollinger; the missionary, Rev. J. D. Domer; and J. A. Rossman.

In September 1871, the old academy property was purchased for a little more than \$3,000. After undergoing extensive repairs this building was dedicated October 15, 1872, Rev. T. G. Clewell officiating. The interior was again refitted in 1874-75; but proving inadequate to the requirements of the growing congregation, this building was removed in 1888 and a new brick building was erected, which was dedicated December 23, 1888. In 1922, under the pastorate of Rev. C. D. Slagle, a new and more commanding church building, specially adapted for Sabbath school work, was erected. The corner stone was laid August 10, 1923, the Rev. F. E. Hetrick officiating. The new church was completed and dedicated January 25, 1924, at a cost of \$25,000, under the pastorate of Rev. F. N. Boyer. Bishop W. M. Stanford officiated at the dedication. During the pastorate of the Rev. S. V. Carmany, beginning September 15, 1924, the entire indebtedness was discharged.

While the Rev. A. J. Beale was pastor of the First Evangelical Church of Franklin, a mission station was opened in the suburb of the city, Rocky Grove, which soon developed into an independent organization. A neat brick church was erected which was dedicated October 15, 1899. Rev. Beale continued as pastor until the Septem-

ber Conference of 1900, when the Rev. E. W. Rischel was assigned to the pastorate. From the beginning this congregation has grown and its finances have been on a firm basis. In 1900 the church edifice was remodeled to accommodate this progressive congregation. This organization, which is known as the Parker Avenue Church, has an unique record in that it has never sent a pastor to conference without his salary being paid in full and its benevolence paid in full, and has retained its pastors the full allotted time generally.

The Oak Hill United Evangelical Church was organized during the pastorate of the Rev. C. D. Slagle of the First Evangelical Church of Franklin in 1903. Prior to the organization a church edifice had been erected in 1902.

The Galloway Evangelical Church was dedicated December 18, 1887. Regular services were first conducted by Rev. Theodore Bach in July, 1885. The society was connected with the Franklin mission. For many years, especially during the existence of this rural village, this church was active. The building was burned.

In addition to those mentioned in Erie and Venango counties, this denomination has seven or eight churches in Warren County and a few more than that in Clarion County, and others throughout the region.

The approximate number of churches within the region is seventy-five; ministers thirty, and members six thousand two hundred. They belong to the Pittsburgh Evangelical Conference, organized in the early fifties.

The Jewish Synagogues in the Region—The Hebrew people of Erie formed themselves into a congregation on August 12, 1853, with some eight or ten persons attending. They met for services for a time at Fifth and French streets, their first rabbi being Mr. Weil, who came to them in 1861. Their places of worship have included one on Holland Street, between Eighth and Ninth streets; another in the Metcalf Block on State Street; and one in Becker's Block at Sixth and French streets. They secured a lot on West Eighth Street in 1882, where a handsome synagogue was erected. It is called the Anshe Chesed Synagogue. The B'rith Shalom Synagogue was organized in 1896, and is termed the orthodox congregation, as distinguished from the Anshe Chesed, which is denominated the reformed church.

On November 26, 1907, "In compliance with the requirements of the act of the General Assembly of the Commonwealth of Pennsyl-

vania, a charter was granted Sarith Israel, an Hebrew church Congregation, a Corporation formed for the purpose of the support of public worship of Almighty God in Oil City in accordance with the faith, doctrine and discipline of the Orthodox Hebrew Church, the existence to be perpetual."

There are now three synagogues in Erie County; two in McKean; one in Warren; two in Crawford; one in Venango; three in Mercer; one in Jefferson, and one in Clearfield counties. The Jewish population of the region is approximately four thousand.

Other denominations represented within the region include Christian Science, Wesleyan Methodist, African Methodist Episcopal, Free Methodist, The Church of Christ, Church of God, German Reformed, The Nazarene Church, Adventist, United Brethren in Christ, and Saints of God.

In Colonial days both the Quakers and the Moravians had zealous missionaries working among the Indians throughout the region, some of whom have been mentioned in other chapters.

The Harmony Society—Unlike the other religious denominations within the State of Pennsylvania, which were first established in the eastern part of the State, one was first introduced in the western section. The adherents of this sect have been variously known as Rappists, Harmonists and Economites, and they played a part both in the religious and the economic life of western Pennsylvania.

Their founder was George Rapp, who was born in 1757 in Württemberg, Germany. He was a believer in socialistic community living and being very earnest in his convictions attracted a considerable number of followers toward the close of the eighteenth century.

In 1803, to escape persecution, George Rapp disposed of his property in Germany and came to America in search for a location where he might establish his followers and, like the early Swedes and William Penn, he was attracted to Pennsylvania. He purchased five thousand acres of land in the Conoquenessing Valley in Butler County for \$15,000 and in a few years several hundred of his followers came to this haven which he had established for them. In 1805 they assumed the name of the Harmony Society and called their town Harmony. George Rapp was the religious leader of the group and his adopted son, Frederick Reichart or Rapp, had charge of the administrative and financial affairs of the society. The members pooled their wealth and all possessions, and adopted the plan of communal ownership by the society, and their prosperity was remarkable. They

engaged in various industrial and business undertakings with great success.

For some reason not known, in 1814 Rapp established a new home on the Wabash River in Indiana, after selling the town and lands of Harmony for \$100,000 to Abraham Ziegler, and his group moved to their new home in 1815, to which they also gave the name of Harmony.

Once more they built a town and established factories, mills, and engaged in various undertakings, while their leader became a member of the Indiana Legislature. However, they became afflicted with sickness and encountered considerable hostility and met with reverses, so that it was decided to return to the hospitable and tolerant State of Pennsylvania. Once more they sold a whole town, the purchaser being Robert Owen, the English industrialist, who believed in coöperative living and desired to establish communal living on a large scale in America. He paid \$150,000 for his newly acquired properties and named his town New Harmony, which soon acquired a population of several hundred.

Upon the return to Pennsylvania the Harmonites purchased three thousand acres of land north of Pittsburgh and laid out a new town which they named Economy. This was really a very attractive town, with beautiful lawns, trees and flower gardens, and attractive brick houses, bordering on the Ohio River. By 1825 they were well established in their new location and the construction of new buildings began. Of the more important Economite buildings the Great Hall, Music Hall and church may still be visited, now preserved as historic shrines by the State. The Great House, three stories with forty-five rooms, was designed as a home for George and Frederick Rapp and today is little changed, its brick type of Colonial architecture making it an attractive building.

The society destroyed itself by the adoption of celibacy. They adopted children and welcomed new members and workers who were not conformists, but the great majority were strict celibates. In 1831 a bogus Count, whose real name was Bernhard Müller, but posed as Count Maximilian de Leon, came from Germany with a number of followers and joined the society. The "Count" and his people could not adapt themselves to the mode of life of the Rappists and did not care to practice celibacy, and there were many among the younger members of the society who shared their views. The "Count," together with about two to three hundred others, left the society, tak-

ing about \$100,000 with them, and endeavored to establish their own town, but in this they were unsuccessful.

The settlement was conspicuous among communistic experiments for its prosperity; its members were estimated to possess \$500,000 in surplus capital in 1860. The people were both frugal and progressive. Among other things, they owned a one hundred-ton steamer which carried passengers and freight; operating as the Pittsburgh & Wheeling Packet, it was a profitable undertaking.

Upon the death of Frederick Rapp, George Rapp appointed two men to act as co-administrators; they were Jacob Henrici and R. L. Baker. As industrial competition became greater, these men invested in other interests, including various manufacturing plants, coal mines, real estate, and finally their industrial activities brought them into the region embraced within the scope of this work.

William Davidson, originally a native of Butler County, and from the vicinity of Economy, acquired a tract of excellent timber land across the Allegheny River from Tidioute, in Warren County. He was in need of money for development of this property and secured a loan from the society secured by a mortgage. He became unable to repay the loan and the society came into possession of the property and successfully conducted lumbering operations on it.

Following the drilling of the Drake well, the Economites started to drill on their land and, before the close of the year 1860, they had a well producing six hundred barrels a day. They drilled a considerable number of wells, which they designated by letters of the alphabet instead of numbers. They, like many others, drilled many dry holes, but also producing wells of varying productive capacity and, in 1867, a writer stated in "The Titusville Herald": "The finest oil field in this region belongs to our friends, the Economites; their lands are on the opposite side of the River from Tidioute and on them are six producing wells, some of which have been yielding oil for six years." They were progressive and kept in line with modern development. In 1868 they had a well which had dropped in production to fifty barrels and as an experiment they ran the drill into the well several times and increased the production to 150 barrels.

On January 1, 1869, the Economites and the Economy Oil Company still owned six thousand acres near Tidioute on which there were twenty-two producing wells, thirty-two dry wells, and a daily production of six hundred barrels. They had in use forty engines to produce the necessary power for their operations, and they have been credited with being the first in the oil regions to employ steam power in drilling.

They early saw the possibilities of the pipe lines and they built a line beneath the Allegheny River to Tidioute through which they pumped their oil and it was loaded into tank cars and hauled to final destinations by the railroad. William Davidson, the former owner of their land, was employed by the company as manager.

They were generous and did much good, always aiding in times of disaster, aided merchants in financial difficulties and helped those in need. They gave land on which Geneva College was started.

About 1890 the trustees ascertained the poor condition of the treasury. The Harmonists were popularly believed to be wealthy, but they had in reality become poor. In an effort to bolster the finances, John Duss reduced the cost of hiring laborers, sold much of the land, liquidated almost half a million dollars' worth of railroad stock, and finally secured a loan from a friend. He induced the American Bridge Company to buy over a mile of land at Economy and to erect their plant on it, and thus Economy became Ambridge, with its great industrial activity. In 1905 the society was dissolved by permission of the courts.

CHAPTER XVII

The Medical Story

The contributions of Pennsylvania to the honorable profession of medicine have been notable. One native Pennsylvanian has been accorded the title of "The Father of American Medicine" and has been referred to as the American Sydenham. Thomas Sydenham, born September 10, 1624, at Wynford Eagle, Dorset, England, was the eminent English physician who revived the Hippocratic idea that observation should have precedence over theory, and who has been recognized as the founder of modern clinical medicine, and his accounts of malaria, plague, smallpox, hysteria and gout are clear and concise. He must also be credited for the first description of scarlatina and for the modern definition of cholera.

The American counterpart of this illustrious English medical scientist was Benjamin Rush, the greatest American physician of his time, who exerted a tremendous influence in the field of medicine.

Born in the vicinity of Philadelphia in Byberry Township, in 1745, he was left an orphan at an early age. He was brought up in the home of an uncle by marriage, a clergyman by the name of Finley. Rev. Samuel Finley, an eminent colonial educator, recognized in the young man entrusted to his care a youth of unusual promise. He entered Princeton at the early age of fourteen, and, what is remarkable, received his Bachelor's degree just a year later. He especially distinguished himself as a Greek scholar, which is attested by his translation of the Aphorisms of Hippocrates from the original Greek. This he did for his own amusement.

The young man's own preference was to follow the pursuit of law, but it was fortunate for the medical profession and posterity that he chose medicine, most likely due to the suggestions of his uncle. In accordance with the custom, he was apprenticed to a physician, Dr. John Redmond, with whom he studied for six years.

In the year 1766 he went abroad to study in Edinburgh. His originality of research and great promise secured for him the atten-

tion of that illustrious American, Benjamin Franklin, who financed further studies abroad.

Upon his return to Philadelphia in 1769, he soon demonstrated the strength of his leadership. In education especially he was notable, and it has been stated that he was one of the greatest educators of his age. For over twenty years he occupied the chair of chemistry in the School of Medicine, College of Philadelphia. While outstanding as a leader of education, his greatest contribution to medicine was his habit of taking nothing for granted. Certain diseases might be treated specifically, but to him of more importance were the basic principles underlying diseases.

It is, however, in the history of the American Revolution that we find greatest interest in the man. Not only was he chairman of the Committee on Independence, but his overpowering influence forced it to adopt the Declaration of Independence as written by Jefferson.

His services as a surgeon or physician with the Continental Army were many and various. Being an aggressive individual, his personality as physician general brought him into contact with other leading spirits among whom was the commander-in-chief of the Colonial forces. It is natural that great spirits sometimes clash because of their overweening power to move men or some other force inherent in their forceful personalities. Because of differences of opinion and difficulties with Washington he resigned his commission in 1778. His connection with the Conway Cabal was unfortunate, but the truly great, however, are judged not by their mistakes, which they sometimes make unwittingly, but by the contributions they make to the field in which they lead and are oftentimes supreme.

After the Revolution, he was active in many fields. Thanks to his guidance, the insane came to receive humane treatment. Radical reforms were adopted, marking a distinct departure from old practice. The mentally afflicted were no longer to be treated as pariahs or wild beasts, but as those in need of sympathetic care. It would not be improper to call him the father of psychiatry and the founder of the modern hospitals for the insane.

His ready mind soon grasped the idea that his country needed an educated citizenry if it would assume the leadership in the world he dreamed for it. Consequently, he became an ardent exponent of education for the masses, and the establishment of a free school system. Therefore, he might be called the author of free public schools in Pennsylvania.

The nobility of men's characters stands out in days of adversity. In 1793, a great yellow fever epidemic swept the city of Philadel-

phia—the greatest of all time in its history. People left the city by the thousands, doctors as well as others among the terrified multitude. To the care of the remaining few surgeons and physicians were left the lives of the stricken. Among them was the distinguished Dr. Benjamin Rush. Day and night he labored, and it was not surprising that, exposed as he was to the disease, he himself became a victim of its attack. When he had scarcely recovered from the debilitating effect of the fever he was again at work.

While the knowledge of the part played by the mosquito in the spread of this disease was not known, he strongly advocated the elimination of unsanitary conditions throughout the city. This aroused the ire of real estate men as it does in modern times when the elimination of a nuisance touches the pocketbooks. Such vigorous opposition to him was pursued that handbills and pamphlets were issued vilifying him. What is worse, even his own immediate friends in the medical profession joined in the campaign against him.

As is too many times the case, the reason for their vilification was a matter about which none of them knew certainly, namely, the etiology of yellow fever and the treatment. However, Rush had succeeded where others failed. This in the face of some of his methods which measured by modern medical technique were crude indeed.

Worn out from the battles he had waged in behalf of mankind he spent part of his latter years in writing. His contributions to the welfare of humanity caused him to be recognized by not only his own country, but by foreign nations as well. His own country honored him by positions of trust and esteem, but such a strenuous life reached its close all too soon. He died just as the second war of independence was getting under way, an independence which not only typified his country, but which characterized his own life—a free, virile and independent thinker worthy of more recognition than history has given him. He died in Philadelphia on April 19, 1813, after a five days' illness from typhus fever.

The history of medicine west of the Allegheny Mountains, as in the East, was in colonial days closely associated with the military history, and begins with the occupation of the French at the junction of the Allegheny and Monongahela rivers at Pittsburgh. Contrecoeur brought a force of Canadians and Indians to the mouth of the Allegheny on April 27, 1754, driving out Ensign Ward, who under English directions was attempting to erect a fort there. Contrecoeur erected a fort which he called Duquesne after the Governor-General of Canada. The next year the English General Braddock, with a

large force, including Washington and Dr. James Craik, marched against Fort Duquesne. He crossed the Monongahela River at what is now Kennywood Park, near Pittsburgh, and entered what appeared to be a quiet forest, but which proved to be alive with French and Indians. Here Braddock suffered a disastrous defeat and was himself wounded and carried to the rear amid the rattle of musketry and the death yell of the savages. The services of Dr. Craik, the eminent surgeon-in-chief of the English expedition, and his assistants were at once in demand.

Braddock's defeat left the entire western country exposed to the ravages of the Indians, and the French forces were supreme in their command of the headwaters of the Ohio River at Fort Duquesne.

Three years later, 1758, General John Forbes attempted to do what Braddock had failed to do, take Fort Duquesne and drive the French out of the region, and guard the white inhabitants against the attacks of the Indians. Forbes himself was a sick man and was carried most of the way on a litter; soon after his return to Philadelphia, he died and his body was buried with a suitable inscription in old Christ Church.

The French, when Forbes was within a few miles of them, burned and abandoned Fort Duquesne and floated down the river. When Forbes marched into the ruins of the fort, November 25, 1758, he was accompanied by his military surgeons as well as by several other medical men numbered among his officers.

The forces raised in Pennsylvania for the Forbes expedition against Fort Duquesne, called a regiment, were in three battalions, the general officers being Brevet Lieutenant-Colonel John Shippen, son of Edward Shippen of Lancaster; commissary of the musters and paymaster, James Young; surgeon, Dr. Bond; chaplain, Rev. Thomas Barton, Church of England minister at Lancaster, rector of St. James' Church; wagon master, Robert Irwin, and deputy wagon master, Mordecai Thompson of Chester County.

The 1st Battalion was commanded by Colonel John Armstrong, leader of the Kittanning expedition; Lieutenant-Colonel Hance Hamilton of York; Major Jacob Orndt; surgeon, Blain; chaplain, Rev. Charles Beatty, a Presbyterian; adjutant, John Phillip de Haas, and quartermaster, Thomas Sullivan.

The 2d Battalion was commanded by Colonel James Burd, a Scotchman by birth, who had married into the Shippen family and lived not far from Harris' Ferry, now the present city of Harrisburg. His lieutenant-colonel was Thomas Lloyd, apparently the physician

of that name, great-grandson of the former Lieutenant-Governor; the major was David Jamison; other officers were: surgeon, John Morgan; chaplain, Rev. John Steel, Presbyterian; adjutant, Jacob Kern; quartermaster, Asher Clayton, and commissary, Peter Bard. James Hayes took Colonel Burd's company and was wounded at Grant's defeat, Grant's Hill; Samuel Miles, of Philadelphia County, as lieutenant took Colonel Lloyd's company and was wounded in an attack on the French and Indians at Ligonier.

The other companies, apparently, were led by Christian Busse, Joseph Scott, Samuel Weiser, Alexander McKee, John Byers, John Haslett, John Singleton, and Robert Eastburn.

The 3d Battalion was commanded by Colonel (Dr.) Hugh Mercer, whose lieutenant-colonel was Patrick Work, the other officers being: Major George Armstrong; surgeon, Robert Bines; chaplain, Rev. Andrew Bay; adjutant, James Ewing; quartermaster, Thomas Hutchins, and sergeant-major, Samuel Culbertson.

Colonel Hugh Mercer was left in charge of Fort Pitt upon Forbes' departure for the east. Mercer was an army colonel, but before that a doctor of medicine. Mercer, the first man in authority at Fort Pitt, a military man and physician, was followed by several others who were also military men and physicians. The first physicians in Pittsburgh were all military men. Dr. Arthur St. Clair, who represented Washington on the western frontier, was a physician; so was Dr. John Connolly, who represented Governor Dunmore. Drs. Edward Hand and William Irvine, two of the commandants at the fort following Dr. Hugh Mercer, were also military men. Dr. John Knight, whose heroic adventures with Crawford will ever be remembered, was a military man. Dr. George Stevenson, Dr. Nathaniel Bedford, Dr. Andrew Richardson were prominent physicians of Pittsburgh, and also military men. Other notable physicians who also possessed military titles were the following: Drs. David Marchand, Samuel Marchand, Frederick Marchand, Felix Brunot, Frank LeMoyne, John Wishart, Joel Lewis, James King, Cyrus B. King, Silas N. Benham, James McCann, and James Bissett Murdoch.

It is of interest that there were several families in which there were physicians in three or more generations, and among these may be mentioned the names of Wishart, LeMoyne, Marchand, Mowry, Shaw, Mabon, and Gallagher.

The early physicians of Pittsburgh and the Pittsburgh district came from England, Ireland, Scotland, France, Germany, and Swit-

zerland, and in the early days a great many of them came from Carlisle, more than from any other part of this country.

There were at least three noble physicians who performed the dual function of minister of religion and practitioner of medicine, Doddridge, Dodd, and Jennings. One physician, Addison, was the son of Judge Addison; Dr. Agnew was the father of Chief Justice Agnew, mentioned in the chapter relating the history of the Donation and Depreciation lands; Dr. Edward Gazzam, brother of Dr. Joseph Gazzam, left medicine to study law.

The first medical organization in the region was the Western Medical Society, which was organized in 1814. This was followed by the Pittsburgh Medical Society in 1821, the Allegheny Medical Society in 1838, the Nathaniel Bedford Club in 1864, the Allegheny County Medical Society in 1865, the Academy of Medicine in 1888, and the College of Physicians in 1906. A number of smaller medical clubs were also organized, among them the Fortnightly Club, the Austin Flint Club, and others.

Dr. James Craik was born in Scotland, and came to this country with Braddock on his expedition. He was with Washington at the battle of Great Meadows. When Braddock was wounded in his disastrous expedition against Fort Pitt, his wounds were dressed by Dr. Craik, assisted by Drs. Anderson and Calhoun. Braddock died July 9, 1755, and Washington himself read the burial service from the Book of Common Prayer, assisted by Dr. Craik. Later Dr. Craik was appointed to the medical department of the army by Washington and raised to the position of physician-in-chief. For many years he was Washington's private physician and enjoyed his friendship. He accompanied Washington on his visit to Fort Pitt in 1770, and there he met Dr. John Connolly at Semple's Tavern. He died in Fairfax County, Virginia, in 1814. Washington in his will wrote of Dr. Craik these tender words: "My compatriot in arms, my old familiar friend."

Dr. Hugh Mercer was the son of a minister of the Church of Scotland, and was born at Aberdeen. He studied at the university in his native town. In 1740 he entered the medical school of Marischal College from which he graduated in 1744. One year after graduation he became attached to the army of Prince Charles, the Pretender, affectionately called by the Scotch "Bonnie Prince Charlie." He took part in the battle of Culloden in 1745, when the Scotch were disastrously defeated. The next year he took passage for America; and after a short stay in Philadelphia moved westward and settled at

Greencastle; Mercersburg was named for him. Here, as a pioneer doctor in the wilderness, he practiced medicine in this sparsely settled country.

The spirit of the soldier in this pioneer doctor was awakened at the outbreak of the French and Indian War. He entered General Braddock's army as captain, and was present at his defeat in his attempt to take Fort Duquesne. In this engagement Mercer was wounded and left behind. Later, after many hardships, he succeeded in rejoining the army.

The next year he joined the force of Armstrong, who marched against the Indians and their French allies at Kittanning. This expedition did much to save the inhabitants from the depredations of the Indians, to which they were exposed after Braddock's defeat. On this expedition he was stationed at Bridgeport as assistant surgeon to the garrison and practiced among the people. In an engagement against the Indians he was again wounded and again forced to make his way through hundreds of miles of forest alone. On this weary tramp he was forced to live on herbs and roots and for a time maintained himself by devouring the carcass of a rattlesnake. On one occasion he took refuge in a hollow tree while the Indians were nearby. Finally, after many perils, he reached Will's Creek, since called Fort Cumberland.

For his services under Braddock and Armstrong, Mercer received in 1756 from the corporation of Philadelphia a vote of thanks and a memorial medal. The next year, 1757, Mercer was in command of the garrison at Shippensburg, and in December of that year, he was promoted to the rank of major-general and placed in command of all the forces in the Province of Pennsylvania west of the Susquehanna.

In 1758 Mercer joined the forces of General John Forbes in the expedition against Fort Duquesne, this being his third military excursion to western Pennsylvania. When the French set fire to the fort and departed, the victorious troops under Forbes took possession. The British flag was at once raised and the place, in honor of the great premier of England, was called Fort Pitt and later Pittsburgh.

Leaving Mercer in charge of the fort with two hundred men, Forbes marched eastward; a few weeks after arriving in Philadelphia he died. So it is seen that the first man in official authority at the very beginning of the town of Pittsburgh was a doctor, Hugh Mercer, a man of the highest character who was an ornament to two professions, that of arms and that of medicine.

Left in the smoldering remains of the French fort with two hundred men, subject to attack by the Indians and by the returning

French, the hero of Culloden, of Braddock's Field and Armstrong's expedition, and the pioneer physician of Franklin County, was undaunted; he carried on his task until the temporary fort was completed, January, 1759, which sufficed for the purpose of his small force until he was relieved the next year by General Stanwix. The latter demolished this temporary fort and built in its place a very substantial and costly one which endured until 1791.

Soon after the termination of the French and Indian War, Mercer moved to Fredericksburg, Virginia, and resumed the practice of medicine. His residence for a number of years was a two-story frame house on the corner of Princess Anne and Amelia streets. Soon after he settled in Fredericksburg he married Isabella Gordon of that town, by whom he had one daughter and four sons. Here he became the friend and companion of John Paul Jones, who also was living in this quiet Virginia town, a lieutenant in the Continental Navy.

In 1784 an English traveler published an account of a visit he had made to Fredericksburg during the Revolutionary War. He says:

"I arrived at Fredericksburg and put up at an inn kept by one Weedon, who is now a general officer in the American army and who was then very active and zealous in blowing the flames of sedition. In Fredericksburg, I called upon a worthy and intimate friend, Dr. Hugh Mercer, a physician of great eminence and merit, and as a man, possessed of almost every virtue and accomplishment. Dr. Mercer was afterwards a Brigadier General of the American army, to accept which appointment, I have reason to believe, he was greatly influenced by General Washington, with whom he had long been in intimacy and bonds of friendship. For Dr. Mercer was generally of a just and moderate way of thinking and possessed of liberal sentiments and a generosity of principle very uncommon among those with whom he embarked."

The inn to which he referred was the Rising Sun Tavern on upper Main Street. Weedon, who was said to have been actively engaged in blowing the flames of sedition, was a brother-in-law of Mercer. This loyal son of Britain and admirer of Hugh Mercer was severe with anything that appeared to him to be disloyalty.

Living in the quiet town of Fredericksburg, Mercer pursued his duties of country doctor. He was welcomed at hospitable homes and often found time for social diversions. He was a member of Lodge 4, Ancient Free and Accepted Masons, of which Washington was

also a member, and he occasionally made visits to the home of Washington at Mt. Vernon.

With the beginning of the Revolutionary War, the military man in Mercer once more submerged the medical man, and he actively engaged himself in drilling troops; he became a colonel of the 3d Virginia Continentals, and June 8, 1776, he was promoted to be brigadier-general in recognition of distinguished services. He was with Washington at the battle of Princeton. Here he received seven bayonet wounds and was struck on the head with the butt of a musket. He was removed to a nearby farmhouse where he was tenderly cared for by the wife and daughter of the owner of the farm and by Major Lewis, who had been sent to his aid by General Washington. Dr. Benjamin Rush of Philadelphia and Dr. Archibald Alexander of Virginia rendered the wounded man all possible medical and surgical assistance but he succumbed to his wounds, January 12, 1777. He was buried in Christ Churchyard, Philadelphia, and many years later his body was removed to Laurel Hill Cemetery, where a monument was erected by the St. Andrew's Society, of which he had been a member since 1757. This monument was dedicated, in 1840, and upon it are engraved these words: "General Mercer, Physician, Fredericksburg, Va. Distinguished for his skill and learning, his gentleness and decision, his refinement and humanity."

Soon after his death a monument to his memory was recommended to be erected at Fredericksburg, Virginia, and June 28, 1902, an Act was passed by Congress that this resolution of the Congress of 1777 be carried into effect. A splendid monument has been erected at Princeton to the memory of Mercer and is an inspiration to many hundreds of students in this great college. His memory is also perpetuated in Mercersburg, Pennsylvania, the location of the Mercersburg Boys' School; the town and county of Mercer, Pennsylvania, and Mercer County, New Jersey, in which Princeton is located. There is a fine portrait of Mercer in the possession of the Mercersburg Academy.

Dr. Theodore Diller, in his book "Pioneer Medicine in Western Pennsylvania," says:

"Such is the picture of the first man in command of Pittsburgh, the first physician to practice medicine in this place. While it is true that Mercer's official position was that of a military character, yet we must suppose that he practiced medicine while in command at Fort Pitt, for we have no account of any other doctor in the fort and we do know from the rec-

ords there were several deaths and a number of cases of illness there during the time Mercer was in charge. No other theory is plausible than that Mercer exercised his office of physician."

Arthur St. Clair is another example of a man with the education of a physician who laid aside the work of a doctor to take up that of arms. St. Clair was born in Scotland, but came to this country as quite a young man. He made a speech at the opening of the courthouse at Hannistown, capital of Westmoreland County. He contended against John Connolly in 1773, causing his arrest, and later he suffered a disastrous defeat by the Indians. He was made Governor of Ohio by Washington. In his old age he returned to live near his old home in Ligonier; he died a very old man in great poverty.

Dr. Thomas St. Clair, of Indiana County, grandson of Arthur St. Clair, was graduated from Jefferson College in 1847 and was the first physician to perform a successful ovariectomy in western Pennsylvania. Altogether he performed this operation eleven times, in three of which he was assisted by his nephew, Dr. John M. St. Clair, of Indiana, Pennsylvania; of these three operations, two resulted in recovery.

John Connolly, mentioned in a preceding paragraph, was an early physician who had a stormy career, and was subjected to severe criticism by many of the people of his day. He was an important figure in Pittsburgh in the early days, although as a political character rather than as a physician.

Dr. Connolly wrote quite an extended biography of himself, in which he states:

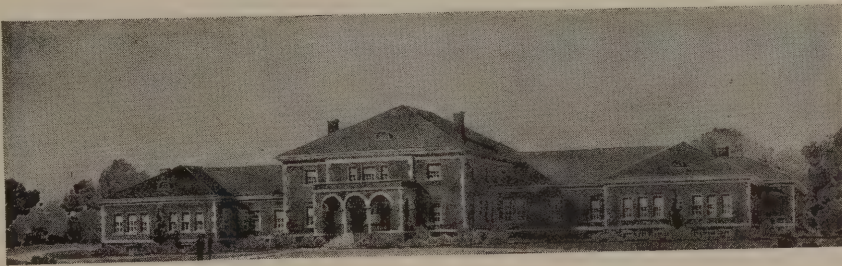
"I was born in America of respectable parents and received as perfect an education as the country could afford. In the early part of my life I was bred to physic, the practice of which it was intended I should pursue; my natural bent of mind, however, determined otherwise. It was my ambition to be a soldier."

Dr. Connolly is said to have studied medicine with Dr. Cadwalader Evans, of Philadelphia, and whether or not he was entitled to a medical degree, it appears he was commonly called Dr. Connolly.

It has already been mentioned that Dr. Connolly stopped at Semple's Inn with Washington in 1770 on his visit to Fort Pitt. Here he married the daughter of the landlord; one account states that he was

as this time the husband of Semple's daughter. He had explored extensively along the Cumberland River and gave to Washington glowing accounts of that locality. He also interested Lord Dunmore, Governor of Virginia, in this country. Dunmore was loyal to the British Crown all through his career and was desirous of claiming for Virginia all the land that he possibly could.

The boundary dispute was an old one, dating back to 1752, and now became acute. Directed by Lord Dunmore, Connolly appeared at the county seat, Hannistown (two or three miles from Greensburg), and in an imperious manner declared the country part of Virginia. Dr. Connolly was by order of another doctor of medicine, General Arthur St. Clair, arrested. However, he was soon released on bail, and hastening to Stanton, Virginia, he was sworn in as a



(Holmes Crosby, Architect)

Hospital of Mercer County Home

justice of the peace. Armed with this authority, he returned to Hannistown, threw a cordon of soldiers about the courthouse and forbade the magistrates to sit and hold court.

Connolly tyrannized and abused the inhabitants, and he renamed Fort Pitt, which, in 1772, had fallen into sad decay under General Gage, Fort Dunmore. A number of manifestoes and letters were dated Fort Dunmore. In 1774 Lord Dunmore himself passed through Fort Pitt on his way down the Ohio to coöperate with General Lewis against the Indians, who at that time were very troublesome. But the events of the Revolutionary War were approaching and by 1775 Dr. Connolly was forced to leave. Soon after, with his loyal master, Lord Dunmore, he boarded a British ship and sailed for England.

After the departure of Dr. Connolly, Captain John Neville, who was destined in 1794 to play a conspicuous part in the Whiskey Insurrection, being at that time excise officer under Washington, was ordered from Virginia to Fort Pitt, where he took possession with one hundred men. He remained until 1777, when he was relieved by General Edward Hand, who was also a physician.

Edward Hand came to this country in 1774 with the 18th Royal Irish Regiment. But soon after his arrival in America he espoused the cause of the Colonists and the following year received a commission in the Continental Army.

Dr. Hand started the practice of medicine in Lancaster in 1775. He knew and met Washington many times. Soon he gave up the practice of medicine to take up the profession of arms. In 1776 he was ordered to proceed to Pittsburgh from Bedford, with fifty men and stores, for the relief of Fort Pitt. He arrived there and took command in January, 1777. At this time he held the rank of adjutant-general. General Hand remained there until May 26, 1778, when he was succeeded by General MacIntosh. He made a number of reports and wrote a number of letters while in Pittsburgh as a military man. We have evidence that he practiced medicine also, for two missionaries passing through Pittsburgh recorded in the diary of one of them: "Mr. Frisbee, unwell, Dr. Hand, a surgeon of the British Army, very attentively and gratuitously attended him during his sickness." In 1778, Hand commanded troops at Albany and the next year joined Sullivan's expedition which marched against the Indians in the Wyoming Valley. Here he suffered hardship and danger and rendered great service to the country. Congress, with Washington, agreed it was the most brilliant event of the year. In 1782 Hand was made major-general.

After the war, Hand returned to Lancaster, Pennsylvania, where he resided until his death in 1802. Here he not only practiced medicine, but took an active part in the affairs of the town, and in 1784-1785 he represented the district in Congress. He married and became the father of several children born in Lancaster, some before and some after the Revolutionary War. He became a member of the vestry of old St. James Church. The minutes of the church show that he was a regular attendant at the meetings of this body.

General Hand's body lies in the old churchyard of St. James, marked by a simple, dignified monument which may be seen from the street by passers-by. Ninth Street, Pittsburgh, was formerly Hand Street.

In 1781, General Brodhead was succeeded by General William Irvine as commandant at Fort Pitt, where he remained two years, during which time he much improved and strengthened the fort. In Irvine we have once more the combination of the military and the medical man. Irvine studied medicine in the famous college of Dublin under the celebrated Dr. Cleghorn and for a period of seven years

acted as surgeon on a British man-of-war. Soon after the conclusion of peace, he practiced medicine in Carlisle, Pennsylvania. Here, despite manners habitually reserved and austere, by his diligence and skill he won for himself the general confidence of the public and built up a fine practice. His brother, Matthew, was a surgeon with Lee's Legions.

At the time he took command of Fort Pitt he was forty years of age. He was now a seasoned warrior for he had been through the Revolutionary War. He was at the head of the troops of Pennsylvania in the Whiskey Insurrection. After serving in Pittsburgh he removed to Philadelphia and there he was made president of the Society of the Cincinnati.

During Irvine's command of Fort Pitt, the last battle of the Revolutionary War in this section was fought, July 13, 1782. Colonel Crawford, who had been routed by the British and Indians at Sandusky, in June encountered a force of Indians under Guyasuta, the well-known chief, and in this campaign Hannistown, the county seat, was burned, all but two homes. Two Indians were killed and the inhabitants lost one girl. Hannistown was never rebuilt; and after a year the courts were removed to Greensburg, which continued as the Westmoreland County seat until 1788, when Allegheny County was taken from it, of which Pittsburgh was made the county seat.

General Irvine was twice a member of Congress. He died in 1804, at the age of sixty-four. A grandson, W. W. Irvine, practiced in Warren County and a street in Pittsburgh bears his name.

Dr. John Knight settled in Fayette County at a very early date. In 1776 he enlisted from West Augusta, then a part of Virginia by force of Connolly, as a private soldier. Afterwards he was appointed surgeon's mate in the 9th Virginia Regiment. On August 9, 1778, he was appointed surgeon of the 7th Pennsylvania Regiment, and stationed at Fort Pitt on the recommendation of General Irvine. In 1782 Colonel W. Crawford, an old friend and boyhood companion of Washington, organized an expedition against the Indians in the northern part of Ohio. At this time Knight accepted Crawford's invitation to accompany him as surgeon of the expedition. This expedition resulted very disastrously; Crawford was taken by the Indians and burned at the stake, Dr. Knight being compelled to witness it. After the burning, Dr. Knight, whose face had been blackened, was sent ahead with one powerful Indian. The mosquitoes were bad and to escape them the Indian released Knight and ordered him to brush away the pests while he prepared supper. This was Knight's

chance, and seizing a heavy club he struck the Indian a blow on the head and escaped. He reached Fort Pitt only after many days of incredible suffering. Dr. Knight died at Shelbyville, Kentucky, in 1838.

Another physician who accompanied Crawford on his expedition was Dr. John Rose, as he was known in this country, but whose real name was Henri-Gustave Rosenthal. He had fought a duel, fled from his native country, changed his name and rose to distinction by his bravery and talent. Having received immunity from his sovereign, he returned to Europe in 1784.

Some of the Early Physicians at Fort Pitt—As has been stated before, General Stanwix relieved Colonel Hugh Mercer at Fort Pitt in 1759 and destroyed the temporary structure which Mercer had erected. Following Stanwix there were a number of commanders in charge of Fort Pitt, of whom several will be mentioned.

Ecuyer, who was in charge of the fort in 1763, the year of the so-called Pontiac conspiracy and of the Bushy Run battle, described in a previous chapter, states that Dr. Boyd was in the fort October 17, 1765, and "that he built a hospital under the draw bridge." The question arises why the hospital was built in this position. Was it because of the protection the bridge afforded, or that the water offered convenient opportunity for cleanliness?

Dr. McKenzie was the principal surgeon at Fort Pitt in 1788. Dr. Adams was there from 1794 to 1797 and Dr. Wilkins from 1795 to 1796.

Dr. John David Schoeff visited Pittsburgh one year after the burning of Hannistown, and just about the time Dr. Irvine was retired from Fort Pitt, in the summer of 1787. He was the first person to cross the Allegheny Mountains in a carriage. Dr. Schoeff was attached to the German troops employed by the British in the capacity of surgeon. After the war he spent two years in traveling.

In 1784, Arthur Lee, commissioner to treat with the Indians, passing through Pittsburgh, writes: "There are four attorneys, two doctors, and no priest of any persuasion, neither church or chapel, so that they are likely to be damned without the benefit of the clergy." He adds: "The place, I believe, will never be very considerable."

The two physicians referred to are Dr. Nathaniel Bedford and probably Dr. Thomas Parker, as his name appears with Dr. Bedford's in the first list of trustees of the Pittsburgh Academy, published in the "Pittsburgh Gazette," March 24, 1787. The fact that he was

elected to such a position would indicate that he had been there for some time and was a man of talent. He was secretary of the board in 1791.

Dr. Nathaniel Bedford was the first physician to settle permanently in Pittsburgh for the chief and only purpose of practicing medicine as a profession. He was attached to one of the English regiments at the garrison at Fort Pitt sometime prior to 1770, for his resignation was announced that year. Bedford lived for years in a beautiful house on Seventh and Liberty streets, extending back to Penn Avenue. He affected the style of an English gentleman, had servants, hunting dogs and lived in great luxury for those days. He appears to have been well educated and composed in Latin. Bedford married Jane Ormsby, daughter of John Ormsby, a leading merchant. At her death he inherited a large tract of land from her father. The "Gazette" of 1811 advertised lots for sale by him in Birmingham. It appears he withdrew from practice after his wife's death and married her lady's maid, living across the river on the Southside.

Christmas Day, 1779, Red Pole and Blue Jacket, two Indian chiefs, were detained in Pittsburgh. The former, taken sick, was attended by Dr. Bedford, assisted by Dr. John Carmichaels, of New Jersey, who was in the army in 1789 and resigned in 1804. Red Pole died three weeks later and his body was buried in Trinity Churchyard, where his grave is marked by a bronze tablet. A few feet from this grave is that of Dr. Nathaniel Bedford; so oddly enough the physician and his red-skinned patient lie side by side in the shadow of the church of which Bedford was a vestryman. He was one of the incorporators of the Pittsburgh Academy, now the University of Pittsburgh, in 1806.

Bedford laid out Birmingham and named Carson Street after an old friend, a seaman, who was probably a brother of Mrs. James O'Hara. Dr. Bedford died childless in 1818 at the age of sixty-four. His grave was in the front yard of John Nusser at the head of Twelfth Street, whence it was removed many years later to Trinity Churchyard.

Dr. Peter Mowry was born in Pittsburgh, September 14, 1770. At the age of fourteen he was apprenticed to Dr. Bedford "to be taught the Science and Art of Medicine and Surgery." Evidently he was well taught for he was a successful practitioner and rose to distinction and eminence. He upheld the dignity of his profession and impressed upon his students the great responsibility of their calling.

He advised hospital experience as the best way of becoming a skilled physician. On one occasion he said: "God help the quack, who with little knowledge and much impudence rushes in where conscientious men fear to enter." Dr. Mowry passed all his professional life in Pittsburgh and died at the age of sixty-three. Like his preceptor, Dr. Bedford, he was a vestryman of Trinity Church. He left two sons, William and Bedford, who were physicians, but both of them died in early manhood. So Dr. Mowry's mantle fell upon his nephew, Robert Mowry, who was born in Pittsburgh, December 23, 1813, and read medicine with his uncle. He was graduated from Jefferson College in 1836. In 1876 he was elected president of the State Medical Society. Among his visible monuments is the Allegheny General Hospital, with which he was materially concerned. He died March 14, 1895.

Dr. George Stevenson was born in New York in 1759. At the outbreak of the Revolutionary War he was a student in Carlisle. Here, with teachers and students, he joined the army, saw action at the battle of Brandywine and spent the winter at Valley Forge. During the war he completed his medical education and reënlisted in the army as a surgeon. Later he returned to his home town, Carlisle, and practiced his profession there until 1794. In this year he joined the troops which Washington was sending to Pittsburgh to put down the Whiskey Insurrection. Arriving in Pittsburgh with the troops, Stevenson was so attracted by the country and the prospects that he resigned from the army and set up an office in Pittsburgh for the practice of medicine, his colleagues being at that time Bedford and Mowry. For many years he was a leading figure in the local affairs of the town, not only as a medical man, but also as a conspicuously public-spirited and patriotic citizen. He took an active part in the educational and social life of the city.

Dr. Stevenson was elected chief burgess, May 23, 1801. He was one of the original directors of the Western University of Pennsylvania in 1819. In 1825 he returned east and died in Wilmington, Delaware. Dr. Stevenson left two sons, Henry A., of the United States Army, and Dr. P. C. Stevenson, of Carlisle.

Dr. Andrew Richardson began the practice of medicine in Pittsburgh in 1798; so he was a colleague of Bedford, Mowry, Brunot and Stevenson, and among the late eighteenth century physicians of the town. In common with other physicians of his day, Richardson, besides pursuing his profession, engaged in many other activities. He made an address on the occasion of the Fourth of July celebration in

1801 which won great applause. Richardson collected an unusually good medical library for his day, including several works in Latin. Like Bedford, he conducted himself in a dignified manner, wore a high collar and stock, and carried a gold-headed cane. He was a member of the Trinity Church and, like Bedford and Mowry, was made vestryman in 1805. He died in 1809, leaving a widow, but no children.

Medical Practice in Western Pennsylvania in Early Days—Following the custom prevailing in England, young men aspiring to a medical career became apprenticed to surgeons or physicians, just as other young men who aspired to master the various trades. The accounts which have come to us lead us to believe that this apprenticeship was a rather hard life. The pioneer physician welcomed a student in his office, for this meant a very substantial help to him. The student's duties were to clean the office, brush the boots and clothing of the doctor and take care of the horse and stable, and he was expected to study the books offered by his preceptor and to assist in operations. He was expected to pull teeth, to bleed and be a junior physician and general handy man. All this took place before he took a course of lectures in the East. All medicines were obtained in the crude form and the apprentice ground them in a mortar, which was no small task. Oftentimes he was subjected to strong odors and fumes which irritated the eyes and nose. He was early taught to cup, bleed and apply leeches which he himself had procured from the neighboring stream. He performed much menial labor, chopping wood, running errands and, it is even said: "in Philadelphia helped the doctor's good wife with the family washing." As he progressed the apprentice helped his master in surgery, which was often a difficult task in the days before anesthetics. He accompanied the doctor, carrying the lantern by night and the saddle-bags by day. After this rather long course of preliminary training at home, he crossed the mountains and attended a course of lectures in some medical school. When he returned he was commonly greeted as "Doc" and aspiring mothers regarded him as a desirable "catch" for their daughters. The young doctor then opened an office and put up a sign, and very likely he inserted cards in the local newspapers. There are a number of examples of such cards published in the "Pittsburgh Gazette" in the early days.

In his book "Pioneer Medicine in Western Pennsylvania," Dr. Theodore Diller says:

"The careers of the first physicians of Pittsburgh were identical with that of its poorest pioneer. The streets of Pittsburgh were few, crooked and unpaved; there was no sewage; country roads were mere cow paths, often irregular and misleading. The Indians dogged his footsteps and he was in constant danger of their depredations, to whom it made no difference whether the scalp at their sides was that of a priest, a physician or a trader. As streets were unlighted and the physician might be summoned to the home of one of the prominent citizens or the hut of a squatter, or to attend an Indian, he must find his way about as best he could. Bedford, Mowry, Stevenson, Brunot and Richardson first made their way about on foot or horseback. Later two-wheeled gigs were introduced which made traveling more tolerable if not exactly comfortable. These pioneers traveled with their saddlebags. Their work was arduous and they traveled far and near; their fees were small, often a mere 'thank you' sufficed. But their services were acceptable and the importance of these pioneer physicians was recognized. Their devotion to duty was high. A barbarous custom, which it appears was rigidly followed, was to give the place of honor to physicians at funerals. So as the procession began its march to the grave, it was headed by the attending physician; and we can only imagine what his emotions were while leading such a procession over rough, muddy roads to the cemetery or graveyard where religious services, not brief in duration, were held."

In the days of Bedford, Mowry, Stevenson, Brunot and Richardson, physicians compounded their own prescriptions, a task which was time-consuming and exacting. The surgeon of today can best appreciate what must have been the handicap of these early physicians in attempting to perform operations when he considers that their instruments were the crudest and simplest and that they were entirely without antiseptics or anesthetics.

Early French Physicians in the Region—The names of Marchand, LeMoyne and Brunot stand out very conspicuously in the history of medicine in western Pennsylvania. Dr. Diller says:

"It may be doubted whether in the whole annals of American medicine the record of the Marchand family can be equalled or excelled, for its pioneer character, the large number and the sterling worth of the men it contributed to the

medical profession. And doubtless even this amazing number of physicians in one family is incomplete, long as it is."

Three generations of LeMoynes made a profound impression upon the history of medicine in western Pennsylvania.

Dr. Felix Brunot left behind him a distinguished name and his talented and highly honored son, Felix Brunot, found an outlet for his sympathies and talent in directions other than medicine. But may we not infer from the fact he was widely known as a philanthropist that he inherited some of his father's instincts?

Thus, as Dr. Diller has said, the names of Marchand, LeMoynes and Brunot are an honor alike to France, America and the medical profession.

The Marchand Family—The earliest known ancestor of this family is Jean Marchand, of Sonvilliers, Canton of Berne, Switzerland. The records of that place show the name to be the most common and one of the most ancient there. There is reason to believe the tradition that the original Marchands, of Sonvilliers, were Huguenots and were driven from France at or prior to the Revocation of the Edict of Nantes by Louis XIV, October 18, 1685.

David Marchand, son of Dr. David and Judith Marie Marchand, was born in Sonvilliers, May 4, 1746. He married Elizabeth, daughter of Ludwick Kemerer (sometimes called Cameron) and, in August, 1770, came to Sewickley Settlement and took up a claim on the little Sewickley Creek, about two miles south of what is now Hempfield Township, Westmoreland County. Here he erected a substantial double log cabin dwelling, in which was conducted a school for the children of the settlement and which was also used for religious services. He practiced his profession of medicine continuously and during the Revolutionary War began the erection of a stone hospital, although frequently interrupted by Indian raids. The building, being stout with windows heavily grated, was frequently used as a fort or stronghold. It was undoubtedly the first hospital west of the Allegheny Mountains and Dr. Marchand appears to have been the first physician outside of Pittsburgh to make a permanent location in the West. He died July 22, 1809, and his widow died in 1817, both being buried in the cemetery of the Reformed Church near Adamsburg. Their children were eight in number, three of whom were physicians—Daniel, David, and Lewis Marchand. The first son, Daniel, practiced in Uniontown; the second practiced in western Pennsylvania. A grandson, William K. Marchand, died in Greensburg, and another

grandson, John Irwin Marchand, practiced in West Newton and afterwards in Pittsburgh. Another grandson, Benjamin Rush Marchand, practiced medicine in this section, as did N. D. Marchand. Other medical practitioners of this family were: Lewis Marchand, George W. Marchand, Thomas S. Marchand, Samuel Sackett Marchand, James I. Marchand, John Louis Marchand, Frederick Marchand and Jacob Marchand.

Felix Brunot—Dr. Felix Brunot, born in 1752, was a surgeon of high distinction, who came to America with the French troops, serving in the medical corps under his foster brother, General Lafayette. He continued in this relationship until the close of the Revolutionary War, participating in all the engagements in which his illustrious chief took part, both as surgeon and soldier.

Brunot began the practice of medicine in Philadelphia, but removed to Pittsburgh in 1797, where he lived to the age of eighty-four and died in 1836. When he began the practice of medicine in Pittsburgh, Drs. Bedford, Mowry, Richardson and Stevenson were among his colleagues. Like these men, Brunot distinguished himself not only as a physician, but as a public-spirited citizen. He is said to have been the first physician in Pittsburgh to employ electricity in the treatment of disease. His name is perpetuated by an island in the Ohio River, which he purchased and where he lived and died.

Dr. Brunot's son, Hon. Felix R. Brunot, became a wealthy man, an outstanding figure in the community, a philanthropist of most generous impulses. His labors on behalf of the Indians were recognized by several Presidents of the United States by important official appointments.

Dr. John Julius LeMoyne de Villiers—Dr. John Julius LeMoyne was born near Paris in 1760, the son of a physician. Like the early pioneer physicians of western Pennsylvania, Dr. LeMoyne received a careful and prolonged medical education and enjoyed the best opportunities which the Paris of that day afforded. He went through a course of seven years' study, including hospital service. He began the practice of medicine in Paris and was present at the storming of the Bastille, being borne along with the crowd against his will. Joining a party of families of distinction, he fled from the cruelty of the French Revolution. He was shipwrecked on his way to this country, but finally landed safely after losing most of his clothing, books and instruments.

On reaching this country, Dr. LeMoyne joined some French settlers at Gallipolis on the Ohio River. He moved to Washington, Pennsylvania, in 1797, where he settled in the practice of medicine and lived the remainder of his life, dying in 1848. In Washington he married Nancy, daughter of Francis McCully. Dr. LeMoyne was an accomplished scholar. Besides practicing medicine he took part in the affairs of the community. He accumulated a very considerable library for those days, which contained valuable books on chemistry and botany, of which he was fond. His love of flowers and gardening was probably inherited from his father, who was in charge of the Jardin des Plantes in Paris.

Francis Julius LeMoyne—One year after their marriage, Mrs. LeMoyne bore a son, Francis Julius LeMoyne, this being the only child of the union. Dr. Francis LeMoyne was graduated from Washington College in the class of 1815 at the age of seventeen. He studied medicine in Philadelphia and became a notable figure in the community both as a physician and a man of affairs. He was a staunch defender of the Negro race, ran for Governor on the Abolitionist ticket, and for Vice-President of the United States. He also belonged to the Underground Railway, which helped many runaway slaves to escape. He gave \$10,000 to start the first library in Washington, Pennsylvania, and \$60,000 to a colored school in Memphis. He gave \$40,000 to found a chair of agriculture at Washington and Jefferson College. He became the leading advocate of cremation and was the pioneer in this field; he erected the first crematory in America. Like his father, he reached a good old age, dying in Washington in 1879 at the age of eighty-one.

Frank J. LeMoyne—Dr. Frank J. LeMoyne, son of Francis Julius LeMoyne, was born in Washington, Pennsylvania, in 1839. He entered the Medical Department of the University of Pennsylvania and immediately upon graduation entered the medical corps of the army. He was in the field and saw active service during the Civil War and was promoted through various ranks to surgeon-in-chief, 2d Brigade, 2d Cavalry Division, Army of the Potomac. He was made lieutenant-colonel for conspicuous gallantry in action. After the war he practiced medicine for many years in Pittsburgh, occupying a place of leadership. He was one of the founders of the Children's Hospital, surgeon of the West Penn Hospital, chairman of the Water

Commission and one of the trustees of the Magee Hospital. He died December 1, 1913.

THREE EARLY PHYSICIANS WHO ALSO WERE MINISTERS
Joseph Doddridge—Dr. Diller says:

"The fullest biography extant of all the pioneer doctors is that of Rev. Dr. Joseph Doddridge. He was born in Bedford, Pennsylvania, October 14, 1769. His parents moved to Washington County near the West Virginia line in the spring of 1773. His father was a Wesleyan Methodist and shortly after arriving built, on his own farm, a house to be used for divine worship and also for a school. This was for a long time known as Doddridge's Chapel. It was near Independence, Washington County. Joseph went to school in Maryland, but returned in a few years to work on the farm. At nineteen he was a traveling Methodist preacher with the noted Francis Asbury. In 1791 his father died and the care of the family and the farm fell upon him and he therefore had to stop preaching. His desire for learning continued and he and his brother Philip (afterwards a noted jurist and member of Congress of Wellsburg, Virginia) studied at home. Working hard on the farm and in the woods all day, they spent the evening poring over books in the dim light of the fire. These two boys entered Jefferson Academy in 1791, and a classmate extols their talents in the highest terms. In 1792 Dr. Doddridge was admitted to the Order of Deacons by Bishop White, in Philadelphia, probably while he was studying medicine and completing his course with Dr. Rush, and he was by the same prelate ordained minister in 1800. He was under the necessity of combining his clerical profession and that of medicine in order to obtain support. His amiable wife used to say when speaking of this early period: 'He was too poor to buy a suit of clothes and when Saturday afternoon came he was obliged to remain incognito while she adjusted and mended his clothes for his appearance in the pulpit on Sunday, knee breeches and long stockings being then in vogue.' Dr. Doddridge founded more than twenty Episcopal churches in Western Pennsylvania, Virginia and Eastern Ohio. In vain he frequently besought Bishop White to place a Suffragan Bishop in Western Pennsylvania. He lamented that

for lack of a bishop the Episcopal Church was losing in her membership."

Both as a minister and a physician, Dr. Doddridge became eminently successful and deservedly popular, and by this means was enabled to educate a large family of children. In later years the Medical Surgical Society of Eastern Ohio elected him an honorary member, "said Society being well convinced of his ability and scientific skill." The writer sending the announcement says: "I do not know, my dear



Memorial Hospital, Kane

brother, that the accompanying certificate will be acceptable to thee, yet it may at some future day serve to remind thee of the high esteem in which thee is held by such of thy medical brethren as had best opportunity of judging of thy professional and moral worth." Signed Anderson Judkins, 1st day, 12th month, 1812. He was also elected a corresponding member of the Academy of Natural Sciences of Philadelphia. He was a fine conversationalist, fond of society, cheerful and industrious, temperate and domestic.

Dr. Doddridge was accustomed to rise at four o'clock in the morning and set apart these early morning hours for his devotions and literature. The medical profession and the whole country is indebted to him for the well-known book he left, "Doddridge's Notes." In it are many quaint descriptions of the early life, manners

and customs of these sturdy pioneers. He reached only his fifty-eighth year of age, dying November 8, 1826, at his home, Wellsburg, Virginia, now West Virginia, where he had gone for his health.

We get a glimpse of the primitive manner of pioneer life in his description of his first trip East when a boy:

"The tavern at which my uncle put up in Bedford was a stone house and to make the change still more complete was plastered inside as to the walls and ceilings. On going into the dining room I was struck with astonishment at the appearance of the house. I had no idea there was any house in the world not built with logs, but here I looked around and could see no logs. I had not the courage to inquire anything about it. When supper came on my 'confusion was worse confounded.' A little cup stood in a bigger one with some brownish looking stuff in it that was neither milk, hominy nor broth. What to do with these little cups and the little spoons belonging to them I could not tell and was afraid to ask. Accustomed to pewter dishes, plates and spoons, gourds and wooden bowls, mush, hominy and maple molasses—a genuine backwoodsman would have thought himself disgraced by showing a fondness for these slops."

"'Doddridge's Notes,' now rare and out of print, may be considered a classic. They are written clearly and simply; the reader receives the impression that they are honest and are accurate and that the writer is a keen observer, discriminating, kindly, friendly and reliable. Aside from their intrinsic worth there is a certain literary charm about the notes which makes them delightful. They reveal a well balanced penetrating and scientific type of mind, a man who deeply loved his fellowman."

Thus writes Dr. Diller in his book "Pioneer Medicine in Western Pennsylvania."

Doddridge was a true naturalist, a lover of Nature, of man, beast, plant and tree. For instance, he found much relaxation in the culture of bees; his garden and orchard were both well cultivated. As against the common brutal instinct, he would not kill, nor permit to be killed, any of the birds on his grounds. In 1813 he published a treatise on "Culture of Bees," in which he gives an intimate description of his apiary and tells all his plans for handling bees, which included that of colonizing instead of killing them to procure the fruit of their labor.

Besides his treatise on bees, Doddridge wrote an article entitled "Logan, the Last of the Race of Skikellimus," and in 1825 he commenced an article called "The Russian Spy," strictures on America, and an Indian novel, neither of which was completed, he having died, as already stated, in 1826, following a long illness. He was the father of twelve children, eight of whom survived him.

Some insight into the character of the man is so well revealed in two letters written by him that they are both worth reproducing here:

"WELLSBURG, June 4, 1822.

"MY DEAR SON: It is now early in the morning, and I am pleasantly situated in the bower, which has been removed from the spread apple tree to the saloon—an oblong grass plot, studded on each side by a row of large fruit trees—at the request of your excellent mother, who often has tea and sometimes dinner set in it. She has just risen from a night's repose, looks young and joyous as a girl of eighteen. She is engaged in talking to the gardener, and is feeding about fifty chickens, which are thanking her for her munificence, in their noisy, gabbling way.

"Many changes have been made here since you left us, an account of which will no doubt be acceptable to you. The foundry lot is at present a first rate garden, mostly planted in vegetables. The old garden is enclosed in a close fence, six feet high, and finished with a coping. I have made a flower garden for Susan. It is tastefully laid out in circular beds and if well taken care of, and stocked with flowering shrubs and plants, will in a few years present a fine parterre of variegated beauty. Gardener as I have always been, Susan is the only one of my family who manifests a taste for this delightful employment; in addition to which I strongly suspect she is to be my prettiest daughter.

"The bees have all been removed to the new bee house, which stands on the northeast lot below the turnpike. It is twenty feet long and eight feet wide, of brick, and plastered inside and out, with a circular dome above. The family vault is of the same dimensions.

"I am at present much amused with the playful gambols of some squirrels which are frisking about, sometimes on the trees, sometimes on the ground. About a month ago, I made a den for some of these little animals, into which I put two

pair. They now seem well satisfied, but will they stay or decamp after some time? I am a republican, and like pets but not prisoners. I do not like to see a bird in a cage, or an animal tied by the neck.

"Joseph is still at the seminary, and doing well. He is much beloved by his teacher and fellow students. It is my wish to make him a finished scholar.

"Reeves and Charles are fine little fellows. Charles has the character of a 'good boy.' Reeves has a little of the Indian in him; but I think not so much as you had at his age. As you are a business man, and will probably become rich, I think you ought to take one of these fine boys and teach him, what he will never learn from his father, the art, trade or mystery of money-making.

"Little Mary has got up and come to me in the bower. Dear little Dutch stumpy, her affection for me is sometimes a little troublesome as her chief concern is to be with me whenever she can find me.

"God bless you and yours, my dear son,

"PHILIP B. DODDRIDGE,
"Portsmouth, Ohio."

"JOSEPH DODDRIDGE

"BEDFORD, Sept. 25, 1824.

"MY DEAR WIFE: We are here. Our progress has been slow; but I have enjoyed the journey, and think my health is somewhat improved.

"The mountain scenery through which we pass is varied, some beautiful, some grand and sublime beyond description. Whilst gazing with delight upon these displays of the Creator's power and goodness, my pleasure was suddenly checked by the reflection that these faculties by means of which I now hold communion with the beautiful in nature must soon be closed in death. But thanks be to Him, who made all things, I can look forward by faith to a world where beauty, peace, and purity are eternal, where none shall know sickness and weariness, such as I now feel.

"At Brownsville and Uniontown, I was invited to officiate, which I did, at the latter place baptizing two children. Having preached in this last place also. Thus without expecting it, I have become a missionary.

"Before arriving here, I intended, if possible, to find the house in which I first drank coffee in 1777 and in the event of

finding it, to invite a few friends to take a cup with me in the same room. Remembering the name of the landlord, Nagel, and being able to give a tolerable description of the house, I found upon enquiring that Dillion's Hotel, where we put up, now occupies the site of Nagel's house.

"Yesterday I went out to see the famous Bedford springs, about two miles from the town. The site, owing to the surrounding mountains, is highly romantic. The buildings of this water place consist of baths, boardinghouses and dormitories. The great Hall for amusements presents many fanciful and gorgeous decorations. On a low piece of ground, some distance from the Hall, on a pedestal of rock, stands a naiad, a large half naked female figure, with a Grecian face and costume, holding in her left hand a huge concha, from the top of which the water of the spring is thrown upward to the height of ten or twelve feet; but poor girl, her fine white drapery is turning yellow, from the action of the sulphate of iron contained in the water which is constantly falling on it.

"The spring issues from the western side of the Cove mountain, at the height of nearly twenty feet above the creek which runs at its base. It is large and rises with great force through apertures in immense rocks, which still retain their primitive situation and aspect. A few rods higher up is another but smaller spring. The water of the principal spring is conducted into a large reservoir, supplying a long range of baths, which are filled at pleasure, by raising a small flood-gate. The water in the baths is reached by a flight of steps. I had not, however, the courage to make the descent. The side of the mountain from which the spring issues is cut into serpentine walks, for the convenience and benefit of pedestrians who wish to take exercise and inhale the mountain air.

"I have been examining the older records here, for names of my family but can only find that of my grandfather, Joseph Doddridge, who is mentioned as foreman of a grand jury in 1777.

"Being within ten miles of the place of my nativity, I wished to learn something concerning my father's title to the land on which he lived in Friend's Cove, but could find nothing, as his title, whatever it was, originated when this was part of Cumberland County. I am informed here, that the land is

now owned by a Mr. Cissner and that my father was unjustly deprived of it, but by whom I have not learned.

"The Court House here was built in the reign of George III. The edifice is of stone, and is, without exception, the most misshapen, sombre-looking building I ever saw. I do not think the Bastile itself could have presented a more forbidding and gloomy aspect. I seated myself for a moment on the bench of justice, and after taking a survey of the antiquated, ill-shapen jury-boxes, and council-table gladly made my escape from the forum of my forefathers.

"JOS. DODDRIDGE."

"Doddridge's Notes" were written in 1824, about two years before his death. From these notes several quotations are given which are of interest.

"DODDRIDGE'S NOTES"

Wolves; Hydrophobia. The wolves, formerly so numerous, and so destructive to the cattle, are now seldom heard of in our older settlements. It may seem strange that this ferocious and cunning animal, so long the scourge of the mountainous districts of Europe, should have so suddenly disappeared from our infant country. The sagacity of the wolves bids defiance to the most consummate craft of the hunters, many of whom, throughout life, never obtained a single chance to shoot at one of them. Sometimes, indeed they outwit them by pit-falls and steel traps; but no great number were killed by either of these means; nor had the price set upon their scalps by the State Legislature any great effect in diminishing their number and depredations. By what means then did their destruction happen? On this subject I will hazard the opinion that a greater number of them were destroyed by hydrophobia than by all other means put together. That this disease took place among them at an early period is evident from the fact that nearly forty years ago, a Captain Rankin, of Raccoon Creek, in Washington County, Pennsylvania, was bitten by a mad wolf. A few years ago, John M'Camant, of this county, met with the same misfortune. In both cases the wolf was killed, and I am sorry to add both these men died, after having suffered all the pains and horrors accompanying that most frightful of all diseases, that inflicted by the bite of a rabid animal.

An animal so ferocious as a wolf, and under the influence of madness, bites everything he can reach; of course, the companions of his

own den and thicket are the first victims of his rage. Hence, a single wolf would be the means of destroying the whole number of his fellows, in his immediate neighborhood, at least. In the advanced state of the disease they lose their native wildness, leave their dens and thickets and seek the flocks and herds about farm houses, and in some instances have attempted to enter the houses themselves for the purpose of doing mischief.

Captain Rankin was bitten by a wolf in his own door. Hearing in the dead of night a noise among his beasts in the yard, he got up and opened the upper part of his door, which was a double one. The wolf instantly made a spring to get into the house. Rankin, with great presence of mind, caught the wolf in his arms as he was passing over the lower door and held him fast on its upper edge and against the door post, until a man belonging to the household jumped out of bed and got a knife and cut the wolf's throat; but the wolf in the meantime bit him severely in the wrist. If I recollect rightly, he lived but a short time afterwards.

A Case of Hydrophobia. Mr. John M'Camant, who lived a few miles from this place on the road to Washington, met a similar death much in the same way. Hearing an uproar among his beasts, not far from the house, he went to see what was the matter. He had not gone far before a wolf sprang at him and bit him severely in the left breast. Being a very strong, resolute man, he caught the wolf by the jaws and held them apart, calling an apprentice lad to bring an axe to knock the wolf in the head. He came with all speed, but finding he had no chance of striking the wolf, without risking an injury to his master, he dropped the axe, ran back to the house and got a butcher knife, with which he cut the wolf's throat. It was between seven and eight weeks before the virus took effect, so-as to produce the symptoms of the terrible disease which followed.

From the time I first heard of his being bitten by a wolf, I anticipated the consequences with horror, and the more so, because he applied to a physician who had the reputation of curing the bite of a mad animal with a single pill. Placing confidence in this nostrum, he neglected all other medical aid. In this pill I had no confidence, having previously seen and examined one of them and found it made of ingredients possessed of scarcely any medical efficacy whatever. On the Thursday preceding his death, he became slightly indisposed. On Friday and Saturday he had the appearance of a person taking an intermittent fever. On Saturday the hydrophobia came on. It was

then I first saw him. Having never seen the disease before, I was struck with consternation at his appearance. Every sense seemed to have acquired a hundred fold excitability. The slightest impression upon any of them, gave him a thrill of the deepest horror. Noise, the sight of colored clothing, the sudden passage of any person between him and the light of the window or candle, affected him beyond description.

On Sunday night his convulsive fits came on. He was then fastened by his hands and feet to the bed posts, to prevent him from doing mischief. At three o'clock on Monday evening he became delirious, his fits ceased, and at two o'clock in the morning death put a period to his sufferings.

It is impossible for language to describe this terrible disease. The horror of mind which he continually suffered was equal to that which would be felt by the most timid lady, on being compelled to go alone at midnight into a graveyard, with the entire certainty of seeing a ghost in the most frightful form which a disordered imagination ever ascribed to a departed spirit. He several times requested the physicians to bleed him to death. Several veins were opened; but the blood had so far lodged itself in the engorgement of the viscera that none could be discharged from the veins. He then requested that some of his limbs might be cut off, that the same object might be effected that way. Finding this request would not be complied with, he looked up to his rifle, and begged me with tears in his eyes to take it down and shoot him through the head, saying: "I will look at you with delight and thankfulness, while you are pulling the trigger. In doing this you will do right. I know from your countenance that you pity me; but you know not the thousandth part of what I suffer. You ought to put an end to my misery, and God himself will not blame you for doing so." What made these requests the more distressing, was the circumstance that they did not proceed from any derangement of mind, on the contrary, excepting during the time of his fits, which lasted only a few seconds at a time, he was in full exercise of his understanding. His discourse until about three o'clock Monday evening was quite rational. He requested prayers to be made for him, and deliberately gave directions about the place of his interment and funeral sermon, all of which requests were complied with.

(The author can appreciate Dr. Doddridge's description of this horrible death. In the months of June and July, 1940, at the University of Pennsylvania, he was required to witness a motion picture description of a victim of hydrophobia dying from the ravages of the

disease, in connection with a scientific course he was then taking. A number of medical men were invited to witness this, but each one stated that he had viewed it once and had no desire to do so again.)

The reader, no doubt, wishes to know as much as possible concerning the famous pill, an improper reliance on which terminated in the death of Mr. M'Camant. I have had an opportunity of examining two of them at a considerable distance of time apart. The first I saw was about five times as large as one of Anderson's pills, and composed of Burgundy pitch and green rue. The second was made of the same material, with a narrow strip of paper rolled up in the middle of it. This paper contained about a dozen ill-shapen letters, but not so arranged as to spell any word in any language with which I am acquainted. The physician who gave these pills reported he got the recipe for making them from a priest of Abyssinia. Such is the superstition which still remains attached to the practice of the healing art, and from which in all likelihood it will never be separated. But why then the celebrity of this pill, as a preventative of canine madness? Has it ever had the effect ascribed to it? Certainly never.

By far the greater number of those who are said to be bitten by rabid animals have been bitten by animals either not really mad, or not in such state of madness as to communicate the disease.

An event which fell under my own observation several years ago will serve to explain the matter. Several children, one of whom was my own, were said to have been bitten by a mad cat, which was instantly killed. On inquiry I found that there was no report of mad animals in the neighborhood. I then gave it as my opinion that the apparent madness of the cat proceeded only from caterwauling. This did not satisfy anyone but myself, so I had to treat the children as I should have, if the cat had been really mad, and thus got credit of curing four cases of canine madness; a credit which I never deserved.

A few years ago a gentleman of my neighborhood brought me his daughter, whom he said had been bitten by a mad cat. I asked if the cat was a male one. He answered in the affirmative. He said he had imprisoned him in a closet. I am glad of that, said I; keep him there a few days, and you will find him as well as ever he was, and so it turned out.

Dogs are subject to similar madness from the same cause. In this state, like cats, they are apt to bite even their best friends. In this case the animal is reported mad and instantly killed. In such cases these pills, as well as other nostrums for this disease, do wonders; and that is where there is nothing to be done.

Diseases and Their Remedies—This, amongst a rude and illiterate people, consisted mostly of specifics. As far as I can recollect them they shall be enumerated, together with the diseases for which they were used.

The diseases of children were mostly ascribed to worms, for the expulsion of which a solution of common salt was given. The dose was always large. I well remember, having been compelled to take a half a tablespoonful, when quite small. To the best of my recollection it generally answered the purpose. Scrapings of pewter spoons was another remedy for the worms. This dose was also large, amounting to, I should think, from twenty to forty grains. It was commonly given in sugar. Sulphate of iron, or green copperas, was a third remedy for worms. The dose of this also was larger than we should venture to give at this time.

For burns a poultice of Indian meal was a common remedy. A poultice of scraped potatoes was also a favorite remedy with some people. Roasted turnips, made into a poultice, was used by others. Slippery elm bark was often used in the same way. I do not recall that any internal remedy, or bleeding, was ever used for burns.

The croup, or what was then called the *bold hives*, was a common disease among the children, many of whom died of it. For the cure of this, the juice of roasted onions or garlic was given in large doses. Wall ink was also a favorite remedy with many of the old ladies. For fevers, sweating was the general remedy. This was generally performed by means of a strong decoction of Virginia snake root. The dose was always very large. If a purge was used, it was about half a pint of a strong decoction of white walnut bark. This when it was intended for a purge was peeled downward; if for a vomit, it was peeled upwards. Indian physic, or bowman root, a species of ipecacuanha, was frequently used for a vomit, and sometimes the pocoon or blood root.

Snake Bites—For the bite of a rattle, or copper snake, a great variety of specifics was used. I remember when a small boy to have seen a man bitten by a rattlesnake brought into the fort on a man's back. One of the company dragged the snake after him by a forked stick fastened in its head. The body of the snake was cut into pieces of about two inches in length, split open in succession, and laid in the wound to draw out the poison, as he expressed it. When this was over, a fire was kindled up in the fort yard and the whole of the serpent burned to ashes, by way of revenge for the injury he had done.

After this process was over, a large quantity of chestnut leaves was collected and boiled in a pot. The whole of the wounded man's leg and part of his thigh were placed in a piece of chestnut bark, fresh from the tree, and the decoction poured on the leg so as to run down into the pot again; after continuing this process for some time, a quantity of the boiled leaves were bound to the leg. This was repeated several times a day. The man got well; but whether owing to the treatment bestowed on his wound, it is not certain.

A number of native plants were used for the cure of snake bites; among them the white plantain held a high rank. This was boiled in milk and the decoction given the patient in large quantities. A kind of fern, which from its resemblance to the leaves of walnut, was called walnut fern, was another remedy. A plant with fibrous roots, resembling the seneka-snake root, of black color and a strong, but not disagreeable smell, was considered and relied on as the Indian specific for the cure of the sting of a snake. A decoction of this root was also used for the cure of colds. Another plant which very much resembled the one above mentioned, but violently poisonous, was sometimes mistaken for it and used in its place. I knew two young women who in consequence of being bitten by rattlesnakes used the poisonous plant instead of the other, and nearly lost their lives by the mistake. The roots were applied to their legs in the form of a poultice; the violent burning and swelling occasioned by the inflammation, discovered the mistake in time to prevent them from taking any of the decoction, which had they done it, would have been fatal. It was with difficulty that the part to which the poultice was applied was saved from mortification, so that the remedy was far worse than the disease.

Cupping, sucking the wound, and making deep incisions which were filled with salt and gun powder, were among the remedies for snake bites. It does not appear to me that any of the internal remedies used by the Indians or the first settlers of this country were well adapted for the cure of the disease, occasioned by the bite of a snake. The poison of a snake, like that of a bee or wasp, must consist of a highly concentrated and very poisonous acid, which instantly inflames the part to which it is applied. That any substance whatever can act as a specific for the decomposition of this poison, seems altogether doubtful. The cure of the fever occasioned by this animal poison must be effected with reference to those general indications which are regarded in the cure of other fevers of equal force. The internal remedies alluded to, so far as I am acquainted with them, are possessed of little or no medical efficacy. They are not emetics, cathar-

tics, or sudorifics. What then? They are harmless substances which do wonders in all these cases in which there is nothing to be done.

The truth is, the bite of a rattle or copper snake in the fleshy or tendinous part, where the blood vessels are neither numerous or large, soon heals under any kind of treatment. But where the fangs of the serpent, which are hollow and eject the poison through an orifice near the points, penetrate a blood vessel of any considerable size, a malignant and incurable fever was generally the immediate consequence and the patient expired in the first paroxysm. The same observation applies to the effects of the bite of serpents when inflicted on beasts. Horses were frequently killed by them, as they were commonly bitten about the nose, in which the blood vessels are large and numerous. I once saw a horse die of the bite of a rattlesnake. The blood for some time before he died exuded in great quantities through the pores of the skin.

Cattle were less frequently killed, because their noses are of a gristly texture, and less furnished with blood vessels than those of a horse. Dogs were sometimes bitten and, being natural physicians, they commonly scratched a hole in some damp place and held the wounded part in the ground until the inflammation abated. Hogs, when in tolerable order, were never hurt by them owing to their thick substratum of fat between the skin, muscular flesh and blood vessels. The hog generally took immediate revenge for the injury done him, by instantly tearing to pieces and devouring the serpent which inflicted it.

The itch, which was a very common disease in early times, was commonly cured by an ointment made of brimstone and hog's lard.

Gunshot and other wounds were treated with slippery elm bark, flaxseed and other such like poultices. Many lost their lives from wounds which would now be considered trifling and easily cured. The use of the lancet and other means of depletion in the treatment of wounds, constituted no part of their cure in this country in early times.

My mother died in early life of a wound from the tread of a horse, which any person in the habit of letting blood might have cured by two or three bleedings, without any other remedy. The wound was poulticed with spikenard roots and soon terminated in an extensive mortification.

Most of the men of the early settlers of this country were affected with rheumatism. For relief of this disease the hunters generally slept with their feet to the fire. From this practice they certainly

derived much advantage. The oil of rattlesnakes, geese, wolves, bears, raccoons, groundhogs and polecats was applied to swelled joints and bathed in before the fire.

The pleurisy was the only disease which was supposed to require blood-letting; but in many cases a bleeder was not to be had.

Coughs and pulmonary consumptions were treated with a great variety of syrups, the principal ingredients of which were commonly spikenard and elecampane. These syrups gave but little relief.

Charms and incantations were in use for the cure of many diseases. I learned, when young, the incantation in German for the cure of burns, stopping blood, for the toothache, and the charm against bullets in battle, but for the want of faith in their efficacy, I never used any of them.

The erysipelas, or St. Anthony's fire, was circumscribed by the blood of a black cat. Hence there was scarcely a black cat to be seen whose ears or tail had not been frequently cropped for a contribution of blood.

Whether the medical profession is productive of most good or harm, may still be a matter of dispute with some philosophers who never saw any condition of society in which there were no physicians, and, therefore, could not be furnished a proper test for deciding the question. Had a believer in the healing art been amongst the early inhabitants of this country, he would have been in a proper situation to witness the consequences of the want of the exercise of this art. For many years in succession there was no proper person who bore the name of a doctor within considerable distance of the residence of my father. For the honor of the medical profession I must give it as my opinion that many of our people perished for want of medical skill and attention.

The pleurisy was the only disease which was, in any considerable degree, understood by our people. A pain in the side called for the use of the lancet, if there was any to be had; but owing to the sparing use, the patient was apt to be left with a spitting of blood, which sometimes ended in consumption. A great number of children died of croup. Remittent and intermittent fevers were treated with warm drinks, for the purpose of sweating. The patients were denied the use of cold water and fresh air. Many of them died. Of those who escaped, not a few died afterwards of the dropsy or consumption; or were left with paralytic limbs. Deaths in childbed were not infrequent. Many, no doubt, died of the bite of serpents in consequence of an improper reliance on specifics possessed of no medical virtue.

My father died of an hepatitis, at the age of forty-six. He labored under this disease for thirteen years. The fever which accompanied it was called the "dumb ague," and the swelling in the region of the liver "the ague cake." The abscess burst and discharged a large quantity of matter which put a period to his life, in about thirty hours after the commencement of the discharge. Thus, I for one, may say



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that in all human probability, I lost both parents for want of medical aid.

Witchcraft—I shall not be lengthy on this subject. The belief in witchcraft was prevalent among the early settlers of the western country. To the witch was ascribed the tremendous power of inflicting strange and incurable diseases, particularly on children, of destroying cattle by shooting them with hair balls and a great variety of other means of destruction, of inflicting spells and curses on guns and other things, and lastly of changing men into horses and after bridling and saddling them, riding them in full speed over hill and dale to

their frolics and other places of rendezvous. More ample powers of mischief than these cannot well be imagined.

Wizards were men supposed to possess the same mischievous powers as witches; but these were seldom exercised for bad purposes. The powers of the wizards were exercised almost exclusively for the purpose of counteracting the malevolent influences of the witches of the other sex. I have known several of these witchmasters, as they were called, who made a public profession of curing the disease inflicted by the influence of witches, and I have known respectable physicians who had no greater portion of business in the line of their profession than many of those witchmasters had in theirs.

The means by which the witch was supposed to inflict diseases, curses and spells, I never could learn. They were occult sciences, which no one was supposed to understand, excepting the witch herself, and no wonder, as no such arts ever existed in any country.

The first German glass blowers in this country drove the witches out of their furnaces by throwing living puppies into them.

The greater or less amount of belief in witchcraft, necromancy and astrology serves to show the amount of philosophical science in any country. Ignorance is always associated with superstition, which, presenting an endless variety of sources of hope and fear, with regard to the good or bad fortunes of life, keep the benighted mind continually harassed with groundless and delusive, but strong and often deeply distressing impressions of a false faith. For this disease of the mind there is no cure but that of philosophy. This science shows to the enlightened reason of man, that no effect whatever can be produced in the physical world without a corresponding cause. This science announces that the death bell is but a momentary morbid motion of the ear, and the death watch the noise of a bug in the wall, and that the howling of the dog and the croaking of the raven are but the natural languages of the beast and fowl, and no way prophetic of the death of the sick. The comet, which used to shake pestilence and war from its fiery train, is now viewed with as little emotion as the movements of Jupiter and Saturn in their respective orbits.

Crime—The greater the amount of freedom, the greater the necessity of a steady and faithful administration of justice; but more especially of criminal justice, because a general diffusion of science, while it produces the most salutary effect on a general scale, produces also the worst crimes by creating the greater capacity for their com-

mission. There is scarcely any art or science, which is not in some hands, and certain circumstances, made an instrument of the most atrocious vices. The arts of navigation and gunnery, so necessary for the wealth and defense of a nation, have often degenerated into the crime of piracy. The beautiful art of engraving and most useful art of writing, have been used by the fraudulent for counterfeiting all kinds of public and private documents of credit. Were it not for science and freedom, the important professions of theology and physic would not be so frequently assumed by the pseudo priest and the quack, without previous acquirements, without rights and for purposes wholly base and unwarrantable.

Still it may be asked whether facts warrant the belief that the scale is fairly turned in favor of science, piety and civilization; whether in regard to these important endowments of our nature, the present time is better than the past, and the future likely to be better than the present. Whether we may safely consider our political institutions so matured and settled that our personal liberty, property and sacred honor are not only secured to us for the present, but likely to remain the inheritance of our children for generations yet to come. Society in its best state resembles a sleeping volcano, as to the amount of latent moral evil which it always contains. It is enough for public safety, and all that can be reasonably expected, that the good preponderate over the evil. The moral and political means which have been so successfully employed for preventing a revolutionary explosion, have as we trust, procrastinated the danger of such an event for a long time to come. If we have criminals, they are speedily pursued and brought to justice.

Rev. Cephas Dodd—Besides Doddridge, another man, in the person of Cephas Dodd, studied and practiced both theology and medicine. Like Doddridge, he studied at Jefferson College under Rev. John McMillan and, like Doddridge, he studied theology first and medicine afterwards, acting on the suggestion of his friend, Dr. Henry Blachly. It appeared that he first studied medicine to make him more effective as a minister of the gospel, but as time went on his practice grew to large proportions. He exercised a sphere of wide influence in the community in which he lived and he was a credit to himself as well as to both professions. He died at the age of seventy-nine, leaving behind him one son, Thaddeus Dodd, and a grandson, W. S. Dodd, of Washington, Pennsylvania.

Rev. Jacob Jennings—In Dr. Jacob Jennings we have another example of a man who preached the gospel and practiced medicine.

Dr. Jennings practiced medicine in New Jersey until he was licensed to preach, when he moved to Westmoreland County. Here he exercised the duties of a physician and minister of the gospel from 1792 to 1811. He died in 1813. His son, Ebenezer Jennings, settled near Burgettstown, Washington County, and became famous as a promoter of the practice of vaccination. He died in 1808 at the early age of thirty-three.

Physicians of the First Half of the Nineteenth Century—Dr. David Wishart was the first of four generations of physicians to practice in western Pennsylvania. He was born in Perthshire, Scotland, in 1796, and upon emigrating to this country he settled in Huntingdon and later in Bedford County. Here his son, John, who was born in Scotland, began the study of medicine and, in 1808, was graduated from the University of Pennsylvania. He at once began the practice of medicine in Washington, where he attained first rank as a practicing surgeon and consultant.

His son, John W. Wishart, was also graduated from the University of Pennsylvania and served as surgeon in the 140th Pennsylvania Regiment of Volunteers. After the war he settled in Pittsburgh, where he resided until his death. His son, Charles A. Wishart, followed in his father's footsteps; after engaging in general practice of medicine several years he took up the specialty of ophthalmology, which he pursued until his death. He was one of the founders of the Eye and Ear Hospital.

Dr. Joel Lewis was born in Delaware in 1790. He studied medicine at the University of Pennsylvania; among his teachers were Rush, Chapman and Physick. He began the practice of medicine in 1811, immediately after he had gained the degree of Doctor of Medicine. He was a skilled surgeon and deeply devoted to his profession. He was an ardent patriot and, in 1822, was made brigadier-general of the 15th Division of the Pennsylvania Militia. The same year another honor came to him when he was made president of the Pittsburgh Medical Society, which had been founded the previous year. But his promising career was short, for he died March 28, 1824. Dr. Lewis inherited much real estate from his maternal grandfather, who settled in Pittsburgh during the Revolutionary War. A granddaughter became the wife of Dr. Frank LeMoyne.

Dr. James Agnew was the father of Daniel Agnew, of Beaver, afterwards Chief Justice of the Supreme Court and mentioned in the chapter relating the history of the Depreciation and Donation Lands

in the region. He came to Pittsburgh from Philadelphia in 1815, where he began the practice of medicine and very soon attained an enviable position in the profession. Dr. Agnew was associated with Dr. Simpson, another physician of note of that day. An advertisement in the city directory stated they were ready for business and one or the other would always be at the shop. These two physicians probably conducted the first drug store and drug warehouse in Pittsburgh. Another practitioner of the early days was Dr. Dimmitt, who was associated with Dr. Agnew in the practice of medicine. To him is credited the distinction of being the first physician west of the mountains to use Jenner's method of vaccination.

Among the early nineteenth century physicians, the two Gazzam brothers, Joseph and Edward, figured very prominently for many years. Their father, William Gazzam, was educated at the University of Cambridge. He became a journalist and took a strong position against the Crown, which got him into trouble, and he emigrated to America in 1793. He first settled in Philadelphia, where his son Joseph was born in 1797. He moved to Pittsburgh in 1802, where he passed the remainder of his life. In 1803 he was appointed collector of the Port of Pittsburgh by Jefferson on the recommendation of the then Secreary of State, James Madison. He married twice and died in 1811, leaving fifteen children. The brothers, Joseph and Edward Gazzam, were born of the union of their father with his second wife, Anne Parker Gazzam.

Joseph Gazzam was born in Philadelphia in 1797; and when five years of age moved with his father to Pittsburgh, where he resided continuously until his death in 1863. In 1824 he married Harriet Breeding, of Brownsville, daughter of Judge Nathaniel and Mary Ewing Breeding. Two children, James and Harriet, resulted from this union. Dr. Gazzam and his wife, as well as their daughter Harriet, are buried in the Allegheny Cemetery.

From the year 1817, when he was graduated in medicine from the University of Pennsylvania, he continued in active practice until the day of his death in 1863, so his medical career was a long one. It was also an exceedingly active and varied one. When he began practice, Pittsburgh was a town of about six thousand inhabitants, and when he died its population was about sixty thousand. He encountered and fought valiantly several epidemics of cholera and smallpox, which visited Pittsburgh from time to time, and in these efforts he was ably supported by his talented brother, Edward, who was both lawyer and physician, more of the former than the latter. He no doubt

saw Lafayette when he visited Pittsburgh, in 1825, and heard his brother Edward deliver the speech of welcome which made him famous. He witnessed the great fire of 1845 and saw the outbreak of the Civil War in 1861. Doubtless in his youth he had conversed in Pittsburgh with Revolutionary soldiers, probably with General O'Hara, Major Isaac Craig, General Butler and others; he lived through the Mexican War and saw the blue uniforms of the Federal troops as they marched away from Pittsburgh to aid in putting down the rebellion. In 1863 Dr. Gazzam and Neville Craig, who was born in Pittsburgh in 1787, and was the premier historian of the city, both died. Doubtless these two notable men saw much of each other.

Dr. Gazzam took part in founding the Pittsburgh Medical Society in 1821, the Allegheny Medical Society in 1848, but he died two years before the Allegheny County Medical Society was organized. He was in the midst of his practice when ether was discovered in 1846. He saw the birth of the Passavant, Mercy and West Penn hospitals. He welcomed the arrival of many colleagues, notable among them Albert G. Walter, when he came to Pittsburgh from Nashville, in 1837, to begin his professional life in Pittsburgh. All in all Joseph Gazzam must, with Bedford and Mowry, be accounted a most notable figure in the medical annals of western Pennsylvania of the first half of the nineteenth century.

Edward Despard Gazzam was born in Pittsburgh in 1803, being six years younger than his brother Joseph. He was at first named Albert Gallatin, but one day his father remarked to his wife: "Albert Gallatin is not yet dead; he may change before he leaves this world. Suppose we call this boy Edward Despard." This was accordingly done. Edward Despard was a friend of the father who had been executed in England, convicted of treason, and was accounted by him a patriot.

Young Gazzam studied law and was admitted to the bar of Allegheny County in 1826. Later he took up the study of medicine and was in due time graduated with the degree of Doctor of Medicine from the University of Pennsylvania. Although his life was an exceedingly active one, it was more concerned with politics and public affairs than with medicine. Yet he always maintained an interest in medicine and the medical profession, and from time to time he rendered it some worth while service. He coöperated with his brother Joseph in combating two or three epidemics in Pittsburgh.

When Lafayette visited Pittsburgh in 1825, Edward Gazzam, although only twenty-one, made the welcoming speech in behalf of the

people of western Pennsylvania; and despite his youth, he acquitted himself with great credit.

Reared a Democrat, he was deeply opposed to slavery and left that party; and with Salmon P. Chase and others founded the Free Soil party. On the platform of this party he was a candidate for Governor of Pennsylvania in 1848. In 1855 he was a candidate for State Senator from Pittsburgh. He was defeated in both contests; but the next year was elected by the Union Republican party as the first Republican Senator from Allegheny County. He was at one time postmaster of Pittsburgh.

Other notable members of the medical profession were: S. R. Holmes, said to have been one of the most popular physicians of the early twenties; Dr. Roseburg was a scion of an old Pittsburgh family, and died of Asiatic cholera at Poland, Ohio, in 1833, at the early age of thirty, although he had so early in life become a physician of great note and president of the Pittsburgh Council and was the founder of the Duquesne Grays, a notable military organization; Dr. James Speer, a notable figure in the medical practice of Pittsburgh in the early part of the nineteenth century, came to that city in 1825 and continued in practice until his death in 1891, at the age of ninety-five. Dr. Speer at once took rank as surgeon and made a specialty of ophthalmology. It is said that he performed the operation for the removal of cataract more than six hundred times. He founded the Allegheny Cemetery.

For many years in the early part of the nineteenth century, Dr. Lewis Irwin was a prominent physician in Pittsburgh. Dr. John H. Irwin was associated with the Southside practice. Another Irwin was called "Devil John" on account of his dashing and reckless manner.

Dr. Jonas McClintock, besides working indefatigably as a physician, was also much concerned with municipal affairs. He was born in 1807 and died in 1879. He was trusted by all people in every relation of life and enjoyed their confidence as have few men. He was easily elected mayor and all through his career was conspicuous in public service.

Dr. Jeremiah Brooks was born February 24, 1797, in New Jersey, and located in Pittsburgh in 1830. He enjoyed a large practice and the esteem of all who knew him. He was active in the organization of the Passavant Hospital and was connected with it as long as he lived. He died August 27, 1865.

Dr. William Addison was the son of the distinguished jurist who was impeached as a result of political connivance which was rife about

the year 1800. Dr. Addison studied both in America and France. He was a noted historian and naturalist as well as physician. He edited a dictionary on ornithology. Dr. Addison associated himself in the practice of medicine with his brother-in-law, Peter Mowry. He is said to have been of studious habits and his eccentric temper somewhat isolated him from his fellow-practitioners, but his great ability and sterling worth were everywhere recognized.

Dr. David Alter (1807-81) was born in Westmoreland County; his father was a Swiss and his mother a German. His early educational opportunities were most meagre. He was graduated from the Reformed Medical College of the United States, an institution of the Eclectic and Botanic School. His career as a physician is unimportant, but living in a quiet obscure country town he made investigations of far-reaching importance.

At the age of eight or nine he was greatly impressed by reading the life of Benjamin Franklin and was strongly drawn to the study of electricity. He independently perfected an electric telegraph in 1836; in 1837 he published in the "Kittanning Gazette" an article on the use of electricity as a motive power. In 1845 Dr. Alter engaged in the manufacture of bromine by a process which he and his partner invented and patented. A large jar of this was exhibited at the World's Fair in New York in 1853. He also invented a process for extracting oil from coal; but the greatest invention of this ingenious man was the discovery and application of the principle of prism to the spectrum analysis. His discovery antedates that of Kirchhoff, German physicist.

The Dickson Family—Dr. John Dickson, of Pittsburgh, was born in Cecil County, Maryland, May 24, 1812. His parents, John and Mary Dickson, were of Scotch-Irish descent. After a preparatory course he entered the Academy at Clinton, Pennsylvania, whence he graduated at the age of sixteen and immediately became a teacher in the district schools of Allegheny County. He attended medical lectures for two years in New York and graduated from New York University. Beginning practice in Sewickley, Allegheny County, he removed ten years later to Pittsburgh, retaining, however, his Sewickley practice. After the lapse of another ten years he returned to Sewickley, but without resigning his Pittsburgh practice. He was married in 1840 to Mary Way, and had eight children; two, John S. and Joseph N., graduated from Jefferson Medical College, Philadelphia, and were associated with their father in practice. Joseph attained national distinction as a surgeon.

Dr. Thomas Dickson, a younger brother of John Dickson, fell a sacrifice for his country in 1862. He contracted pernicious malaria while with the Army of the Potomac in the Peninsular Campaign and reached home only to die.

Dr. John S. Dickson was born April 11, 1844. He received his degree at Jefferson Medical College in 1868 and then studied abroad for two years. He was a surgeon of marked ability and a successful physician. He died September 14, 1892.

Joseph N. Dickson was born April 8, 1848. He was graduated from Jefferson in 1869 and, like his brother, spent two years in London and Paris. "Dr. Joe," as he was familiarly called, inherited a full measure of his father's surgical tastes and abilities. He was a popular physician, a keen sportsman, an ardent lover of Nature, and a genial kindly companion.

Dr. George Bruce was born in Pittsburgh in 1811 and died May 29, 1891. He was a student of medicine in the office of Dr. Joseph Gazzam. He was graduated from the University of Pennsylvania in 1833 and later spent two years in the hospitals and medical schools of Edinburgh and Paris. While in Europe he gave special attention to the heart and lungs and was an acknowledged authority on diseases of those organs.

A memorable figure in western Pennsylvania medical history is that of W. C. Reiter, born in Pittsburgh, March 25, 1817. He began the study of medicine in the office of Dr. Postlethwait, of Greensburg, Pennsylvania, and was graduated in 1839 from Jefferson Medical College. He at first practiced in Mt. Pleasant, but in 1856 moved to Pittsburgh, where he was actively engaged until his death, November 29, 1882. Dr. Reiter was in many respects a remarkable man. He was a bold practitioner and an original thinker. He was a thorough lover of Nature and his ever-youthful enthusiasm, keen observation and graphic speech made him a most entertaining companion. Among physicians he will be best remembered by his brochure on diphtheria, and whatever merit attaches to the heroic use of calomel in that disease belongs to Dr. Reiter.

A young man of great promise, but of short though brilliant career, was Dr. William Wallace, son-in-law of Dr. Walter. He was born in Allegheny, August 22, 1851, received his degree at the St. Louis Medical College in 1870, and died in Pittsburgh, August 25, 1883.

Dr. Joseph Allison Reed was born in Washington, Pennsylvania, December 31, 1823, and was graduated with the degree of Master of

Arts from Washington College in 1842. In 1847 he received his degree of Doctor of Medicine from Jefferson Medical College and at once commenced the practice of medicine in Allegheny. In 1857, when the insane department was divorced from the medical and surgical department of the Western Pennsylvania Hospital, largely through the efforts of Dr. Reed and Dorothea L. Dix, Dr. Reed was placed in charge of Dixmont, where he gave twenty-seven years of his life to the amelioration of the pitiful condition of the insane. Dr. Reed was known throughout the country as an authority on the subject of insanity and he was frequently called by the government, both State and National, to aid in proper legislation for the care of the insane. His contribution to the literature of insanity was varied and valuable. He died November 6, 1884.

Dr. Reed was the father of Judge James H. Reed, a distinguished jurist of Pittsburgh, who in turn was the father of David Aiken Reed, one-time United States Senator from Pittsburgh.

Dr. Thomas Gallagher, born in 1822 in Indiana County, Pennsylvania, graduated from the University of Pennsylvania in 1849, and practiced medicine in Pittsburgh for nearly forty years. In connection with his son, Dr. R. C. Gallagher, he edited the "Pittsburgh Medical Journal," the first effort at professional publicity in that city. Dr. Gallagher made many valuable contributions to medical literature, being a laborious and enthusiastic student and a conscientious and successful practitioner.

James King, Pittsburgh, son of John King, ironmaster, was born January 18, 1816, in Bedford County, Pennsylvania. He was educated at the Bedford Classical and Mathematical Academy and studied medicine in Lexington, Kentucky, under Dr. Benjamin W. Dudley, subsequently entering the medical department of the University of Pennsylvania, from which he was graduated March 14, 1838. He began practice at Hollidaysburg, Pennsylvania, and in 1844 he moved to Washington, Pennsylvania, where he remained about six years, and during a portion of this time he occupied the chair of anatomy in the Washington College. This he resigned on account of ill health and in 1850 removed to Pittsburgh. At the outbreak of the Civil War he entered the United States Army as surgeon at Camp Curtin, as division surgeon of the State, and as medical director of the Pennsylvania Reserves, which last position he held until the battle of Antietam. After this battle, at the request of Governor Curtin, he was mustered out of the Federal service to become surgeon-general of the State, holding this position until August 1, 1864, when he resigned

and resumed his practice in Pittsburgh. He was, it may be added, a member of the first examining board organized by his predecessor in the office of surgeon-general and in his own discharge of the office did much to systematize its regulations and to improve its management, not to mention his official reports, the style and method of which so commended themselves to the surgeon-general of the sister State of Ohio, that he took the report as a model. He was the second president of the Allegheny County Medical Society in 1866.

Albert G. Walter—The name of Dr. Albert G. Walter has several times been mentioned in this chapter. It may be said that he was the "stormy petrel" in the medical profession in western Pennsylvania in his day.

Referring to him, Dr. Diller says:

"To Albert G. Walter must be accorded the first place of distinction in the medical annals of Pittsburgh. He was a most picturesque character, a man of unbounded enthusiasm and capacity for work, a man of great talent, exceedingly ingenious, resourceful and creative; a man of imagination and courage, he was an isolated figure in the medical world of his day. His makeup and temperament were such that he was constantly in hot water. His was a tumultuous and tempestuous life. He had many professional enemies in Pittsburgh; even the few who admired him, feared him. He relates, himself, that on one occasion efforts were made by rival practitioners to instigate malpractice suits against him, and he in turn instigated a number of such suits. The story is told that an actual attempt was made to lynch him in the Hill District when he had got himself into some sort of a broil."

Among the colleagues with whom Walter remained friendly were Drs. T. W. Shaw, Joseph Gazzam and Coffee. A search in the prothonotary's office in the Pittsburgh Courthouse shows that in the years 1866 and 1872 Walter was engaged in malpractice suits.

Walter was born in Germany, June 21, 1811. He was left an orphan at the age of four. He received the degree of Doctor of Medicine from Königsburg and afterward took a year's postgraduate course in Berlin. He was a pupil and assistant of the celebrated Diefenbach and at the latter's suggestion emigrated to America. On this voyage he was shipwrecked upon the coast of Norway and lost all his belongings. With other passengers, he landed in London with-

out friends or resources of any sort. He procured a position as clerk in a law office, where he worked a year and thereby earned money to continue his journey to America. During his enforced stay in London, he attended medical lectures and especially profited by those of Sir Astley Cooper, who always afterwards remained his friend.

Upon his arrival in New York, Walter found the profession unsympathetic; there was "no room for a Dutchman." By manual labor he earned enough money to take him to Philadelphia, but meeting a similar reception there, he shortly afterward left for Nashville,



Greenville Hospital, Greenville

Tennessee. After engaging in practice there for two years, he came to Pittsburgh in 1837, where he remained in active practice until his death on October 14, 1876.

When he came to Pittsburgh he was extremely poor. He was befriended by George W. Jackson, father of J. B. Jackson, who always remained his friend, and at this time advanced him sufficient money to buy a horse. He opened an office on Liberty Avenue, near Ferry Street. Later he moved to Fifth Avenue at the corner of Cherry Alley. He hesitated to make this move, fearing it was too far removed from the center of population. Afterwards he moved a square north, to Sixth Avenue, where he resided until the day of his death. In 1846 he married Frances Anne Butler, daughter of Major

John J. Butler, of the United States Arsenal, and niece of Dr. Joseph Gazzam. Dr. Walter was very happy in his family life and deeply devoted to his wife and children. Of his four children, two died in childhood, but a son and daughter survived him, and when Dr. Diller wrote his most interesting book, "Pioneer Medicine in Western Pennsylvania," in 1927, he said: "Mrs. Wallace (the daughter) and several grandchildren are still living in Pittsburgh." Fearing tuberculosis in his son, he sent him to Switzerland in 1858; and two years later, with his wife and daughter, he crossed the ocean with the expectation of remaining a year with him. He visited several uncles in Germany and commented to his wife that Germany had not progressed any since he had left it more than twenty years before, and was happy to reflect that his lot was cast in America, where all things were progressive.

It is said that children always loved Walter and that in general he held not only the admiration but the affection of his patients. He was fond of all sorts of pets: pigeons, squirrels, dogs, goats, etc., and for a time carried a pet squirrel in his pocket, which was trained to travel up his back, about his neck and then retire to his coat pocket. It was the same emotion in Walter which made him love animals that led him to take a most active part in the affairs of the Humane Society of Pittsburgh, of which he was one of the founders. This society was organized in 1874 and Walter presided at the first meeting. He said a man who would not be voluntarily kind to animals must be forced to be kind "to obey the commands of heart, of conscience and of God." He said to his associates: "I am ever ready to serve this good cause with all my heart."

From the early days in his Pittsburgh career, Walter secured accident work from the mills, and his superiority to other surgeons who did such work was so quickly apparent that he soon acquired a national reputation for accident surgery. It is said that Walter's first fee was received shortly after his arrival in Pittsburgh; five dollars paid him by Dr. T. W. Shaw for his services in assisting him in an operation. This he at once used for the purchase of a box of the blackest cigars obtainable.

Walter was a great student. He worked through the day and sat up until the small hours of the night making notes and devising mechanical methods of accident treatment. With German thrift, he was economical to the last degree. His widow for many years kept drawers containing bits of straps, odd buckles, splints and every mechanical device which he used. Mrs. Walter stated that he never

destroyed any appliance he had used on a patient. Dr. Albert Pettit, who succeeded to his offices, states that one very large room was lined with deep closets which were filled from floor to ceiling with surgical appliances and casts of all sorts. He personally supervised the making of these appliances at the factory, occasionally hammering them out himself. He kept most accurate records of all his patients, not only those operated upon, but others as well. In his books of case records he criticized his colleagues with utmost candor. No doubt he considered these records private, and he had no hesitation in criticizing severely the treatment of any patient in whose case he had succeeded another physician or surgeon. This same spirit of criticism of his professional brethren which pervaded his records he carried out in his communication with patients; and this brought him a heritage of hatred from most of his colleagues.

Walter's enthusiasm for good surgery and his properly high estimation of his own skill led him to stop patients on the street and ask them who was their doctor and to inform them that they had been improperly treated. It has often been charged that Walter never failed to "play to the galleries." Certainly many of his cases got into the newspapers. In one case a patient was brought up the river on a steamboat, with a surgeon in charge. The man had sustained a crushed leg, which had been encircled by a coil of rope. Dr. Walter asked the surgeon who brought the patient, what he thought should be done in the case. The answer was that the leg should be amputated. Dr. Walter replied in a boastful way: "Nonsense, I will save this man's limb." The next day the patient was dead and Dr. Walter had made a lifelong enemy of the surgeon, who afterwards attained some prominence.

Walter at one time implanted peas in the subcutaneous tissues of a patient with tuberculosis of the knee. The peas were said to have germinated, as Walter hoped, but the result was, of course, a failure. The patient, greatly dissatisfied, entered suit against Walter. This afforded an opportunity for many of Walter's surgical colleagues to get even with him and they rejoiced to testify against him in court. If one wonders why Walter adopted a treatment so obviously foolish, the answer is that tuberculosis of the knee was exceedingly stubborn to treatment of all sorts, and in trying out this remedy Walter was following the recommendation of several of the highest authorities on surgery of his day.

Walter had learned from his old teacher, Dieffenbach, a new method of correcting deformities of the human body by subcutaneous

divisions of tendons; and this method he at once practiced in Pittsburgh, very extensively and with great success. Indeed, he had already, during his stay in Nashville, done considerable orthopedic surgery, having corrected a number of club feet; and these operations were the earliest, or among the earliest, of the kind performed in America.

Orthopedic surgery, for which his ingenuity and imagination peculiarly fitted him, enlisted Walter's deepest interest. Many plaster casts showing deformed limbs before and after treatment were to be seen in the Museum of the Medical School of the University of Pittsburgh, and they bore silent testimony to his skill, consuming energy and unbounded enthusiasm.

The story is told that Walter, soon after his arrival in Pittsburgh, met on the street a tall Irishman, whose legs were terribly deformed. The doctor persuaded the Irishman to permit him to operate, at first on one leg only, and this proving a great success, the patient was only too glad to permit him to operate on the other leg. Dr. Joseph Gazam, who assisted Dr. Walter, was profoundly impressed by the success of this operation.

Dr. Walter was a man of fierce courage, who feared nothing or no one. On one occasion, his neighbor, Dr. W. H. Daly, having some grievance against him because of his treatment of a patient, crossed the street and, entering Walter's office, demanded a retraction of the professional slander. Walter picked up a heavy paper weight and was about to strike Daly with it, when Daly told him if he attempted to use that paper weight it would be the last act of his life. Dr. H. H. Clark was an eye witness to this occurrence and stated that, notwithstanding Walter's great courage, he showed his belief that discretion was the better part of valor and laid down the paper weight.

Dr. Clark, who was intimately associated with Walter, studied medicine under him, dressed his surgical patients for three years, kept his books, collected his bills, and was his general factotum, stated that notwithstanding his arrogance, his unpopularity, his selfishness in the treatment of other members of the profession, he was the greatest surgeon that ever practiced in Pittsburgh, consideration being given to the limitations of surgical knowledge of that day. Walter's chief aim in life was, in the opinion of Dr. Clark, not the acquisition of money; that, while he did like financial rewards, these were to him a secondary consideration. He was consumed with interest in, and love for, good surgery; and it was this that made him so impatient of much

of the surgery he saw about him and the producers of it. His disgust and contempt for many of the surgeons was very deep and generally outspoken. He did not hesitate to advise people to bring malpractice suits and often testified in court in such suits, although he complained bitterly when such suits were brought against him. In short, Walter more or less questioned the right of anyone else to practice surgery in the town, but this feeling was not extended to physicians who confined their labor to medicine.

Walter established a private hospital in a building on Bluff Street, near the present site of Duquesne University. Dr. Charles Emmerling, with his wife and several children, lived in this hospital for a short time while he and Walter were in partnership. This arrangement was of short duration; Dr. Emmerling found the place too cold and uncomfortable for himself and family, and the arrangement uncongenial.

Walter's medical career in Pittsburgh was one of great activity; the story of his skill, energy, resourcefulness and versatility must draw from the reader a tribute of admiration for this great man. He published many magazine articles and two notable books, in one of which, "Fractures of Bones," he advocated the use of silver plates, far in advance of his time. Another, entitled "Conservative Surgery," was published in 1867. This work he dedicated to S. D. Gross, of Philadelphia, and James Syme, of Edinburgh. It is to be noted that Walter's contributions were made to the foremost journals of the day, among them being the "British Medical Journal," "The Medical and Surgical Reporter" and "The American Journal of the Medical Sciences," the first of these published in 1857 and the last a year after his death, in 1877. It will be seen that he clearly recognized the fundamental necessity for cleanliness in surgery; he was fully ready to appreciate Pasteur's and Lister's work and, indeed, to act upon it. "It is not too much to say that, had Walter lived, aseptic surgery would have been introduced in western Pennsylvania and become general twenty years before it actually did come into general use," according to Dr. Diller.

His ingenuity, courage and skill are well revealed in a report entitled "Arthoplasty Operation Upon Both Femurs Below the Great Trochanter." Walter reviews the literature on the subject and then reports a case as follows: "Patient was a man 31 years of age, who from the tenth year suffered from ankylosis of both hip joints, the femurs being fixed at right angles to the pelvis." Walter created an artificial joint below the hip joint. After the first operation "very

free suppuration occurred and continued for two or three weeks, but eight weeks after the operation the patient had completely recovered. Operation was performed on the other leg September, 1875." In June, 1876, the condition of the patient was very favorable: "He is able to get out of bed without assistance and can stand upon his feet and walk with crutches better than ever." The paper was accompanied by an interesting photograph.

Walter refers to the reports of his first case of true bony ankylosis, in which he had "opportunity to save and relieve, by removal of a section of the trochanter major."

In 1874, Dr. R. J. McCready, who afterwards became the well-known pioneer in tracheotomy and skilled in the insertion of the O'Dwyer tube, and who had been in practice only ten months, called Walter to his assistance in a case of diphtheria. Dr. Walter performed a tracheotomy, and the patient made a good recovery from the operation and was still living fifteen years ago.

Walter's versatility as a surgeon is at once revealed when it is realized that he was one of the earliest pioneers in America in the field of orthopedic surgery, a skilled oculist, and a most resourceful general surgeon. It is said that, up to the time of his death, he had cut more tendons in one patient than any other living surgeon. His fame as an accident surgeon was Nation-wide.

But Walter's chief claim to distinction is the epoch-making laparotomy which he performed for the relief of a ruptured bladder, the patient making a good recovery. Walter is generally credited as having first performed this operation and as his report is one of historical interest, quotations are made from it as it appears in the "Medical and Surgical Reporter" of November 16, 1861.

CASE OF RUPTURE OF THE BLADDER, TREATED BY ABDOMINAL SECTION

John Borland, twenty-two years of age, blacksmith by trade, of healthy constitution, and strong muscular development, was kicked during a fight, on the lower part of the abdomen, on January 12, 1858. Immediately on receipt of the injury, he became weak and faintish, complaining of violent pain in the region of the bladder. Some hours later, being called to see him, I found the following condition of the patient: The abdomen, without showing any marks of external violence, was somewhat swollen and exquisitely tender to the touch, more particularly over the pubis, where the injury had been received. His pulse was quick and small, skin cool, respiration short

and rapid, incessant were the painful calls at micturition with inability to discharge urine. There was vomituration and vomiting; at first the contents of the stomach, afterwards a slimy, bilious fluid was ejected. On the introduction of a catheter, some bloody urine was drawn off without any relief of abdominal pains, or the constant urging calls to make water. These being the symptoms, no doubt was entertained that the bladder had been ruptured by the violent blow from the point of the foot, and that urine had extravasated in large quantities into the abdominal cavity (the patient having been in the habit of retaining his urine for a long time, and in the present instance for more than six hours)

Ten hours after the receipt of the injury, assisted by Dr. Guenste, chloroformisation having been induced, the abdomen was opened in the linea alba by an incision, beginning one inch below the umbilicus, and terminating about one inch above the pubes, to the extent of six inches. The intestines were found inflated, their peritoneal coat, as well as that lining the interior of the abdominal walls already showed marks of congestion. A soft sponge then cautiously introduced into the abdomen, with which the extravasated fluid, consisting of urine and blood, was carefully removed from the pelvis, and between the convolutions of the bowels, amounting to near a pint. While thus inspecting the abdominal cavity, a rent was found in the fundus of the bladder of two inches' extent, through which the urine had escaped. The cavity of the abdomen being cleansed of the noxious agent, the wound of the bladder was left to itself, as no urine was seen to escape from it. The abdominal wound was closed by strong Carlsbad needles, secured by silver wire (only skin and fascia being stitched, while the peritoneum was left untouched). A flannel bandage encircled the whole abdomen. The patient awakening out of the anesthetic sleep, felt relieved of pain and desire to urinate, so distressing before the operation. Vomiting did not return. Opium again in one grain doses every hour was ordered. Abstinence from drink and perfect quietude of body, with retention of the catheter, were strictly insisted upon. He soon began to doze, had a comfortable night, was free from pain the next morning, complaining only of soreness of the abdomen, without tympanites, sickness or calls to urinate, thirst less urgent

At the expiration of two weeks, with the absence of all pain and tenderness, opium was omitted. The intestines were relieved by warm water injections on the tenth day, when mild nourishment was ordered.

Between the second and third week, the catheter was permanently withdrawn, and only introduced every four hours for the evacuation of the urine. After the third week, the patient left his bed, feeling restored to health and drawing off his urine himself every four hours. He has remained well ever since, working at his trade, and feeling no impediment in his urinary organs.

In this clear and simple manner, Walter records an operation performed in 1858, which was to be epoch-making. For the first time in the history of surgery an intact abdominal wall was opened for the treatment of a ruptured bladder. The Nestor among Pittsburgh surgeons of fifteen years ago, Dr. John J. Buchanan, commenting on this report, calls attention to the fact that while modern methods require intraperitoneal suture of the bladder, Walter deliberately refrained from such suture. His suture did not include the peritoneum, the reason being that at that time suture of the peritoneum was considered a dangerous procedure.

Dr. J. B. Murdoch, in his presidential address before the State Medical Society in 1890, says:

"In 1858, when there was no precedent for such procedure, he boldly cut open the abdomen, washed out the peritoneal cavity, drained the bladder by a catheter retained in the urethra. The patient recovered. This operation was not repeated until eighteen years later and is now recognized as the proper treatment for such an injury."

"The Pittsburgh Dispatch" of November 8, 1886, contains a cable from London describing a remarkable operation performed by Sir William MacCormac, of the Royal College of Surgeons: "It is believed there are no previous instances of success of such an operation in Europe or America." The cable goes on to state that Sir William MacCormac diagnosed the patient's condition as rupture of the bladder. He then made an incision into the abdomen and verified the diagnosis. The bladder was drawn out and sutured. The patient made a good recovery.

At the meeting of the Allegheny County Medical Society in February, 1887, the Committee on Intelligence reported Sir William MacCormac's two cases of successful abdominal section for intraperitoneal rupture of the bladder and commented upon the novelty of the operation as follows:

"Within a stone's throw of the building in which the Society sat, stands the house of the late Dr. Albert G. Walter,

who twenty-five years ago opened the abdomen of a man with ruptured bladder with success and reported the case in the 'Medical and Surgical Reporter' for that year, 1861. It is the first authentic case of the kind in the history of surgery."

In the "Journal of the American Medical Association," February 26, 1887, Dr. Thomas S. K. Morton, in a paper on "Abdominal Section for Traumatism," speaks of Dr. Walter as the pioneer in this work, and the correspondent of the "Medical Record," writing from London, under date of February 5, 1887, commenting on the cases that were the subject of the report of the Allegheny County society, gives Dr. Walter the credit justly due him. Truly, "A prophet is not without honor save in his own country."

In the preface of his work on "Conservative Surgery," Walter says: "Having ardently and almost exclusively engaged in the profession of surgery, to which more than thirty years of faithful labor, in public and private practice, have been devoted, in a locality, too, where accidents and injuries caused by machinery were unusually frequent, the author, in treating *these* cases, soon became convinced that the efforts of *Nature* at salvation and restoration, in injuries, especially in those of a grave character, and *her* conservative aims, on which the surgeon alike as the physician, has mainly to rely, in order to lead the case to recovery, has, alas! been too often either overlooked, or plainly misunderstood."

The plan advocated by Walter is sufficiently revealed by the following quotations from his opening chapter:

"If conservation be attempted, that *first* of all, *free vent* must be given by *long* and *deep* incisions, for the escape of effused blood confined under the fascia, between muscles, and in the cellular tissues of the skin, and that all attempts to bring the soft parts together, when lacerated or cut, by stitches, be *strictly* and absolutely discarded.

"A limb, thus injured, should be placed, without delay, in its whole length upon a well cushioned sheet-iron or tin splint, and the detached pieces of bone followed by resection of their shattered extremities—if splintered, very obliquely fractured, or extensively denuded of periosteum—removed. The *wound* should then be freely enlarged (slitting up skin and fascia) or, if no breach of surface should exist, but more bruising and swelling be present, indicating the extent and severity of the injury, a free incision in the long axis of the limb should at once be made through dermis and fascia, which will liberate the muscles, blood vessels and nerves, from the pressure of blood effused in the

areolar meshes of the different tissues, and give relief to the subsequent swelling of muscles, and extravasation of serum, which always follow in the course of such injuries, with gangrenous destruction of the skin and fascia superadded.

"*Free, deep and early* incisions (the more timely made the better) are, I aver, the *only* measures deserving the name *conservative*, in injuries of this character. Next to them, *warmth*, by warm water dressings (medicated or simple) or by poultices, promptly and assiduously applied, is claimed as an important adjunct. Under its genial and soothing influence, the feeble vitality of crushed and mangled limbs will be roused, local arterial circulation excited and revivication induced, venous congestion relieved, elimination promoted, and suppuration, with cicatrization expedited. Cold applications, under these circumstances, cannot fail to extinguish the quivering sparks of life which are left in the member, and hasten its destruction."

Enthusiasm and great, earnest and deep conviction of the author are well revealed in these brief paragraphs from the opening chapter:

"Many, very many, are the limbs and lives that might have been saved, if due weight had been given to the incontestable fact, that the *unyielding* nature of the fascia, which envelops the muscles and supports them for the performance of their functions, is the main source of danger to the injured limb, and that free division of aponeurotic structure, in all severe injuries, occasioned either by shot or any other crushing power, is the only *safeguard* to limb and life of the wounded."

Then follows a recital of a large number of cases in which the author illustrates many times over the method of treatment which he so eloquently advocates. The cases are not numbered as they would be in works of today, but they are designated with full, and presumably real, names of the patients. The descriptions of patient and injury are brief and quaint, as shown by the following few examples:

"Felix Holler, of Pittsburgh, aged fourteen years, a healthy and well formed boy, while seeking shelter under a warehouse in course of erection, on July 26, 1850, during a heavy thunder storm, was buried by a mass of brick which fell upon him from one side of the building caving in.

"John Carson, aged thirty years, merchant, on December 26, 1851, fell through the hatchway of his store, upon the floor below, during a bitter cold night while in an intoxicated condition, and remained there, helpless, for four hours, exposed to intense frost, before he could be removed to his room.

"Philip Smith, aged twelve and a half years, of Coal Hill, Upper St. Clair Township, Allegheny County, Pennsylvania, of slender frame and bilious temperament, was severely injured on June 3, 1854, while at work in a coal-pit, by a heavy piece of slate falling upon him.

"Christian Reber, aged twenty-three years, puddler by trade, very tall, slender and healthy, of bilious habit and nervo-sanguineous temperament, on October 17, 1855, while engaged at his furnace in a rolling mill, in West Pittsburgh, was struck on the back part of the right leg by a large piece of rock thrown from a hill in the rear of the works, which was being removed by blasting."

After describing his clinical cases, Walter proceeds to notice the methods proposed by Joseph Lister, of Glasgow, Scotland, for the treatment of wounds and injuries, which were influenced by the theory of minute organisms of Pasteur. He tells us that Lister thinks he has found in carbolic acid an agent which can protect the wound from germs floating in the air and that this acid acts as an antidote; the theory is supported by James Syme and other eminent European authorities.

Notwithstanding the fame of these two men, to one of whom his book is dedicated, Walter proceeds to argue against the carbolic acid spray as an application of this theory and to set forth his own views in the following significant language. On this subject, Dr. Diller says:

"It will be observed that Walter argues, not against the germ theory, but against the method of procedure to combat germs which was then in vogue and which is now obsolete, and that he was again ahead of his time in arguing for the great value of sunshine and fresh air and for cleanliness."

"*Pure air*, therefore, I have no hesitation in declaring, is not only harmless, but priceless to man, and to all the rest of creation, whether in a healthy or an afflicted condition. Like the rain drops descending from the great laboratory of heaven—the air, sweet, pure and healthful—is refreshing, invigorating and gladdening to all the inhabitants of this beautiful globe. Its free and unrestrained access to wounds and injuries, then cannot be the cause of these direful complications—erysipelas, phlegmon, gangrene, phlebitis, or pyæmia—which are known to ensue in so many cases.

"*Poison mingled with the air*, then and not *pure air*, is the enemy the surgeon has to contend with in the management of surgical injuries, whether in hospitals or in other unhealthy localities; the only antidote for which, and the only method of averting its injurious effects on

wounds, and on the system at large, being the prompt removal of the patient to a place free from all contaminating influences.

"This appears to my mind a reasonable and logical deduction, which ample experience, revealed in previous pages, has strengthened. The view of this subject here taken, I feel gratified to state, is shared by Mr. Canniff, of Canada, who in the 'Canada Medical Journal' of a late date made some excellent remarks regarding Professor Lister's practice."

As stated by Dr. Diller, the following closing words of Walter are sad enough:

"Having devoted years of study and toil to the salvation of limbs severely, nay, almost hopelessly injured, which but for the conservative practice I advocate, would have been maimed, I cannot deny the gratification I feel in thus being enabled to add one more laurel to the crown of Conservation—bright, enduring and priceless as any she wears.

"If saving the limb or life of the humblest citizen, by unusual efforts, deserves commendation, the principle and practice by which a *whole class of injuries* is rescued from mutilation, danger and death, certainly stands unrivaled. This principle and practice it has been my aim to establish and that I have succeeded cannot in candor be denied me. Though cherishing it as a great boon to the unfortunate patient, worthy of being promulgated, I do not claim credit; but conscious of having contributed my mite for the relief of the maimed, I would consider myself derelict in duty by withholding its publication.

"That my humble, laborious and protracted exertions, devoted to a noble cause should have provoked aspersions and detractions, in special quarters, however, is not to be wondered at. But having succeeded in my efforts, with the result laid open to professional scrutiny, I can well afford to be charitable to those of the profession, who, unwilling to investigate, seek renown only in mutilation and destruction. With such I hold no communion. To the intelligent surgeons alone, I offer these pages and invoke them as judges of the merits."

There exist a large number of colored drawings with closely written notes by Walter, and the drawings show a high grade of artistic merit.

Regarding the man, Dr. Diller says:

"The lessons to be drawn from the life of Walter are, for the most part, obvious. His faults were open and glaring: he was intolerant and greatly lacking in consideration for his colleagues and he was highly egotistical. But, on the other hand, he was a man of remarkable talent and marvelous industry, a genius. It was his love of surgery and his ability to do it well, combined with his driving energy, that made him impatient and blinded him to the rights of colleagues, and so led him to fail to conform to professional etiquette. True, his criticisms were generally well taken, for surgery in Walter's day was for the most part badly done; but it is to be deplored that they were not more tactfully expressed. Had he possessed the qualities of leadership, he might have had the profession solidly behind him, for he is easily the outstanding figure in the medical annals of Pittsburgh and indeed his life stands out as a great beacon light in the surgical history of the United States. So in viewing the life of this great pioneer in surgery, let us with the mantle of charity cover his faults, remembering only his legacy to suffering humanity."

It has been the intention of the author to relate the earlier, rather than the later, history of medicine in the region, but mention of a few physicians of a somewhat later period than that already covered will be added.

Dr. Andrew Fleming was born in Pittsburgh in 1830 and studied under Dr. Gazzam. He was among the first publicly to advocate the establishment of a medical school in Pittsburgh.

Dr. E. A. Wood was an outstanding physician and was one of the founders of the Medical College.

Dr. Cyrus B. King was much interested in surgery, and in the West Penn Medical College, and had a distinguished career over a long period on the State Board of Charities.

Dr. James McCann was born in Allegheny County, in 1837, and became recognized as a leading surgeon. He took a prominent part in the organization of the Western Pennsylvania Medical College.

Dr. Silas N. Benham was born in Washington, Pennsylvania, in 1840, and served as surgeon during the Civil War. He assisted in the organization of the Pittsburgh Dispensary.

Dr. James B. Murdoch was born in Glasgow, Scotland, in 1830. He practiced medicine in Oswego, New York, until 1872, when he

removed to Pittsburgh and practiced there until his death in 1896. He was one of the founders of the Western Pennsylvania Medical School and author of several important monographs. He practiced and advocated the torsion of arteries.

Dr. Thomas Wilson Shaw was born in Glenshaw in 1826 and was engaged in active practice for nearly fifty years. His son, Dr. Charles Stoner Shaw, was born in 1856 and graduated from the University of Pennsylvania in 1879. He died in 1899.

Dr. Shaw was greatly interested in maintaining the high ideals of the medical profession and adherence to the code of ethics of that profession, and was especially concerned about the advertising of nostrums in the medical press. In December, 1885, he with a number of other physicians of Pittsburgh, organized "The Pittsburgh Medical Review," a monthly periodical which was owned and controlled entirely by the editors, Dr. Shaw being editor-in-chief. It is said that, under his persistent efforts, which were especially directed at the "Journal of the American Medical Association," the board of trustees of that publication gradually eliminated from its pages all advertisements which were in conflict with the code of ethics. His contributions to medical literature were largely of the nature of editorials, together with papers on general medicine and pediatrics.

Dr. James A. Lippincott, born in Nova Scotia in 1840, attained national reputation in the field of ophthalmology.

An outstanding medical man in Pittsburgh was Dr. X. O. Werder, born in Switzerland, in 1857. He was one of the first in Pittsburgh to make a specialty of gynecology, in which he attained distinction.

Dr. Eugene Matson was born in Brookville, Jefferson County, in 1858. Of him, Dr. Diller says:

"He was a man of high scholarly attainments, of philosophic attitude of mind, modest and idealistic, ever striving for the advancement of medical science and the better things of life. He was unmarried and alone and gave his entire thought and energies to the science which he loved. His influence was a strong element in conquering the incidence of typhoid fever, whose endemic and annual epidemics, during the early years of his professional life, demanded hundreds of victims annually in the cities of Pittsburgh and Allegheny. His activities and influence in establishing the filtration plant, which put an end to the typhoid fever plague in Pittsburgh, were unceasing and thus aided in saving many valuable lives annually. He was

universally esteemed and admired for his qualities of mind and heart and his untimely death was mourned by all who knew him."

Dr. Robert Wray Stewart was born in 1861. He reorganized the surgical staff of Mercy Hospital in 1890. His career began with the era of antiseptic surgery and he was quick to recognize the value of this contribution to surgical technique.

Dr. W. H. Daly was the first Pittsburgh physician to make a specialty of throat diseases. His name was associated with considerable notoriety on account of the exposure of the beef scandal which developed during and following the Spanish-American War. Dr. Diller says of him: "He was widely traveled and a man of most congenial habits; so that he was not only an agreeable colleague, but a delightful companion."

Another notable physician of this time was Dr. R. Stansbury Sutton, who was a pioneer figure in gynecology in Pittsburgh.

Dr. Charles Emmerling, previously mentioned as having for a time lived in the private hospital of Dr. Walter on Bluff Street, was a most capable physician of the old school, who labored zealously in the practice of medicine to an advanced age and was an honor to the profession. He was succeeded by his son, Dr. Karl Emmerling, who married Julia Anne, daughter of Captain Charles William Mackey, of Franklin. Miss Mackey and the author were schoolmates in Franklin.

Dr. W. R. Hamilton has been described by Dr. Diller as "a man rugged in mind and body, a railroad surgeon of the old-fashioned type, strong, resourceful, emphatic and domineering."

Drs. T. D. Davis and W. S. Foster were greatly interested in medical organization and did much to foster it; both served as presidents of the State medical society.

A very brilliant surgical career came to a close on March 24, 1926, with the sudden death of Dr. Edward A. Weiss, who was a protégé of the celebrated Dr. X. O. Werder, in Honolulu, where he had been sojourning with his wife, the former Hilda Friday, member of a prominent Pittsburgh family. Dr. Weiss, of the surgical staff of Mercy Hospital, Pittsburgh, was widely known as a most capable surgeon and a great many persons throughout northwestern Pennsylvania had been his patients. He was held in high esteem and when word was received of his sudden death, the president of the United States Steel Corporation wired instructions that everything possible

be done by officials in aiding his widow. One of the corporation's boats at Honolulu was placed at her disposal and was used to transport the body of Dr. Weiss and his widow to San Francisco, arriving there on April second; thence they went by rail to Pittsburgh for interment of the body. The author and his family lost a valued friend in the passing of Dr. Weiss, both he and the Friday family having been long time friends.

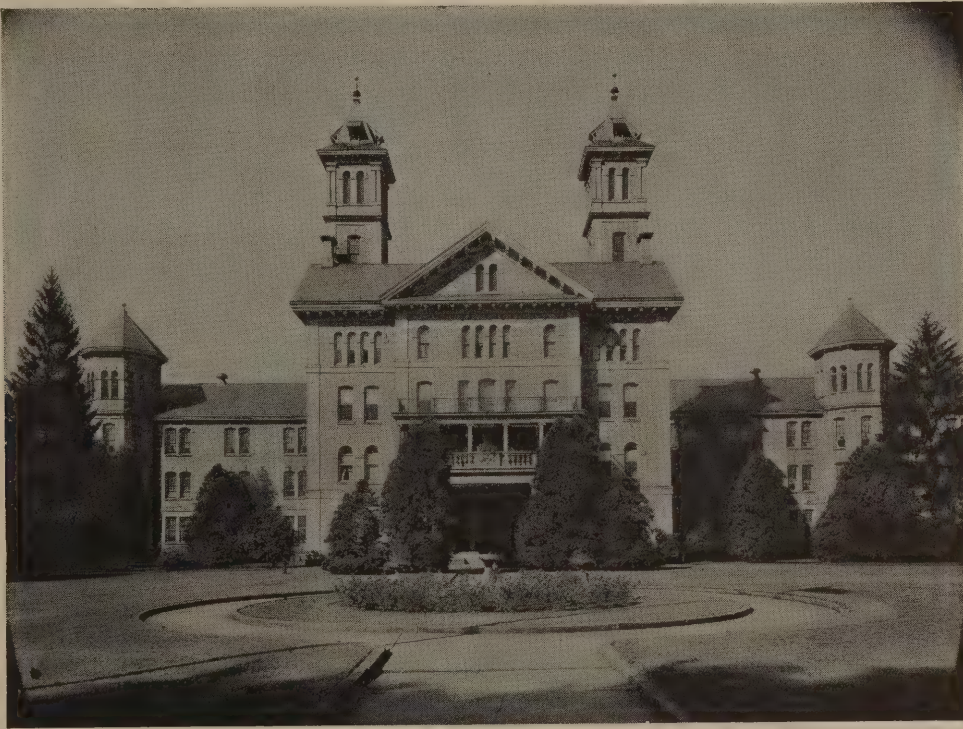
For many years Pittsburgh remained the medical center for the northern counties, and resident physicians in these counties did not appear until near the beginning of the nineteenth century. A writer on this subject stated very aptly:

"The history of medical practice (in this region) covers a period of about one and a quarter centuries, taking its inception in the early days of pioneer settlement, when herbalism as practiced by the grandmothers met the needs of ailing flesh, with the rare advent of some transient doctor connected with military or surveying expeditions sent by the government to quell an Indian uprising or map the course of streams or sectional boundaries. On some equally rare occasion a physician was brought from a distant Eastern town, necessitating a hazardous journey by horseback, as the customary manner of travel, often requiring days to accomplish."

To write anything approaching a complete history of medicine throughout the entire region at this date is impossible. For more than a century physicians practiced in the region without any record whatever of their work, except such as has been handed down by tradition. After the passage of the Act of 1881, all physicians in the State were compelled to register in the county in which they practiced. Since then their history is better preserved, but it is not yet as complete as one could wish. From the very nature of their profession there is little publicity in their work. They came among us, they labored hard and earnestly, often unselfishly, many times their only reward for personal sacrifice being the gratitude of the unfortunate to whom their services were extended. They passed away and are almost forgotten, and, if remembered, it is usually for something which they did outside of the noble work to which they devoted their lives and talents.

An interesting example of fame acquired by a medical man in a field other than that of medicine is that of Dr. Alfred L. King, born in Galway, New York, October 22, 1813. His people were Covenant-

ers, and had little of material possessions. By close application the boy learned to read and write, and perhaps a little about arithmetic and grammar. His father secured a place for him in the family of a physician in Galway as a boy of general work around the house and office. This work turned his attention to the medical profession, for he was employed more or less in the delivery of medicines to patients, and perhaps somewhat in their preparation. After being there a short



Warren State Hospital

time he quarreled with the doctor's wife, and was probably discharged from this position. After that his father managed that he attend school in Philadelphia. The school was conducted by Dr. Wiley, who not only taught, but preached regularly to a congregation. Sometimes, too, he became intoxicated, but he was, nevertheless, an able teacher and the boy made the best of his time there.

Still there clung to him the love for the medical profession and he began to study medicine and attend lectures, and was particularly interested in hospital work, though it existed then in its infancy in the city. For a time he supported himself in a way by lecturing on medi-

cine and by doing odd jobs for the city hospitals. Later he opened an office in the city, but had poor success in securing patients. Finally, he was ejected from his office for the non-payment of rent, and was greatly discouraged. All this time he had been living at the home of Dr. Wiley, his old teacher. At this place he met a merchant from Westmoreland County, named William Brown, who had, after the custom of that day, gone to the city to purchase goods. Being a Covenanter, he had drifted to Dr. Wiley's place. The country merchant had with him a Westmoreland paper, which stated that the village of Pleasant Unity was greatly in need of a physician. Dr. King took the opportunity and came at once, arriving in Pleasant Unity with seventy-five cents. For a time he walked or borrowed a horse, when he was called to see a patient, but he was soon able to equip himself more thoroughly. This was in 1838. His practice often called him into consultation with Dr. Postlethwaite and, becoming acquainted with his family, he was afterwards married to the doctor's daughter, Sidney Postlethwaite. Shortly afterward he formed a partnership with his father-in-law and moved to Greensburg.

Nature had given him a scientific mind, and he paid more attention to geology, botany and chemistry than anything else save his own profession, to which he was devotedly attached. He contributed nine articles on geology to the "Greensburg Republican," which attracted great attention. He also began to write and lecture on scientific subjects, among others on bronchitis, scrofula, cancer, meteors, tornadoes, education, the Hessian fly, cholera, etc. A later writer says of him: "At that time his writings and lectures were not purely orthodox, though if delivered now, when the Bible is literally no longer regarded as a good text-book on geology, they would not be supposed to conflict with the views of the average church member."

A discovery he made in geology gave him a name among all the scientific men of the world. Before 1844 all geologists, both in Europe and America, taught that in the carboniferous age no air-breathing animal existed or could have existed. This they believed was true, because the necessary presence of carbonic acid gas in sufficient quantities to produce the wondrous growths as shown in the formation of coal precluded the possibility of air-breathing animals existing in it. Sir Charles Lyell, who was then the most eminent geologist in England, says that no vertebrated animal of a higher organization than fish were discovered in rocks older than the permian age, until 1844. The permian age follows the carboniferous age, which closes the older division of geological time called the paleozoic age or era.

But Dr. King made a discovery of fossil remains which he dug from the earth in Unity Township, Westmoreland County, which showed the footprints of seven distinct animals on sandstone belonging to the coal measures. For some time he pondered over these fossils, trying to harmonize them with the accepted theory of geology. His discovery was the first indication in the world of the existence of a higher grade of animals in any formation older than red sandstone. It proved that these animals lived before the carboniferous age, and conflicted with the whole system of geology. Professor Silliman, in the "American Journal of Science," in January, 1845, gave Dr. King the credit of a discovery which must of necessity upturn and revolutionize the whole science of geology.

Dr. King arranged all the tracks he had discovered, and invented a nomenclature by which to designate the species of the animals which made them. This he published in the "Proceedings of the Academy of Natural Sciences of Philadelphia," in 1844. Early in 1845 the "American Journal of Science," edited by Professor Silliman, published a full description of the discovery, and illustrated it with drawings and pictures of the fossil marks, etc. Its publication created a great stir in the scientific world. Sir Charles Lyell, president of the Royal Geological Society of London, took the matter up and, like all great men, was open to conviction. He arranged to come to America in the interest of his science and to make a personal examination of the strata in which the footprints were found. He came to Greensburg, and Dr. King took him to the quarries in Unity Township, where the discovery was made. He made a special inspection of the geological formation of that county. A Westmoreland County writer of about forty years ago stated:

"The wise (?) men in our town who could not appreciate Dr. King predicted that when the great English scientist came he would make short work of King's discovery. It is probable that he came here without much faith in the statement as published. But so accustomed was he to reading the testimony of the rocks that it required but a short time to satisfy himself that they were indeed of an older period than the carboniferous age. Turning to Dr. King he threw up his hands, saying, 'It is true, it is true.' He was here in April, 1846. When he first came he was unknown to most of our people, but when they learned that because of his learning he had been knighted by Queen Victoria, and that he was the head of the most

learned scientific body in England, they arose to the occasion and treated him with the deference due so distinguished a man."

Before leaving Greensburg, Sir Charles Lyell gave to the "Argus" the following letter:

"GREENSBURG, PA., April 18, 1846.

"As many persons have inquired at Greensburg since my return from a visit to the quarries in Unity Township, what opinion I have come to respecting the curious markings discovered in 1844 by Dr. King, I shall be obliged if you will state in your journal that I entirely agree in the views which have been expressed respecting these fossil foot marks. They are observed to stand out in relief from the lower surface of a slab of sandstone, which lay some feet below the soil. They closely resemble the tracks of an animal to which, from the hand-like form of the foot, the name of *Cheirotherium* has been given in Europe, where they occur both in Germany and England. It is now universally admitted that such tracks must have been made by a large reptilian quadruped.

"Their position in the middle of the carboniferous formation has been correctly pointed out by Dr. King, for this layer of sandstone in Westmoreland county is decidedly lower than the main Pittsburgh seam of coal, but there are other smaller seams of coal which occur still lower in the series. These are the first, and as yet, the only indications that have been brought to light in any part of the world of the existence of reptiles in rocks of such high antiquity. We cannot, therefore, estimate too highly the scientific interest and importance of this discovery. I am, gentlemen, your obedient servant,

"CHARLES LYELL."

Dr. King's articles and lectures are uniformly characterized by a simplicity of language that one does not expect from so learned a man. He succeeded in conveying information on scientific subjects in popular language that the unlearned even could readily understand. He gave great attention to the flora and fauna of western Pennsylvania. In the study of botany he tried to discover and teach the medical properties of plants. He tried to teach that a knowledge of organic chemistry was an essential in the true education of a physician. He was also a thorough microscopist, and the testimony he

gave in criminal cases on the blood corpuscles found on the clothing of the prisoners aided greatly in the administration of justice.

In 1850 he was appointed a professor of Theory and Practice of Medicine in the Medical College of Philadelphia, but by reason of ill health he was compelled to abandon it. Though able to cure others he could not cure himself. The disease was inflammation of the stomach and intestines, from which he suffered severely for years. He was a tall man and well built, but had never had a robust constitution. On January 2, 1852, he died at the age of thirty-nine. What he might have accomplished had he lived to mature years, no one can tell. As it was, in his youth almost, by his genius and industry, he connected the name of Westmoreland with his own, and perpetuated them in the chief libraries, philosophical societies and universities of Europe, Asia and America.

Dr. John Culbertson Wallace was the first resident physician at Franklin. He was a native of Harrisburg and graduated in medicine at the University of Pennsylvania. In 1793 he accompanied General Wayne in his expedition against the Indians.

In a previous chapter it has been related that, following the historic engagement known as the "Battle of the Fallen Timbers," and the signing of the Treaty of Greenville, General Wayne started to return to his home in Chester County. During his passage down Lake Erie, he became seriously ill, and arriving at Presque Isle (Erie), was unable to proceed further. Dr. Wallace, at the time being at Fort Fayette (Pittsburgh), was summoned to attend his friend and former commander, but hurrying through the forests, he was met at Franklin with news of the death of General Wayne, which occurred December 15, 1796. He remained in Franklin and practiced his profession for three years, then going to Erie, where he rose to prominence, commanded an Erie County Regiment at the beginning of the War of 1812, and was recognized as a distinguished physician and surgeon.

Dr. T. G. Symonds settled in Franklin in 1800, but nothing is known of his subsequent career. For some time Venango County was without a physician, after which Dr. Thomas Smith settled in Franklin and administered to the sick of that immediate period.

The Venango County Medical Society was organized May 8, 1867, at Franklin, under instructions from the Pennsylvania State Medical Society, with the following named officers: President, Dr. Buckland Gillett; vice-president, Dr. S. Gustine Snowden; secretary, Dr. Walter S. Welsh; treasurer, Dr. S. S. Porter; censors, Dr. S. G.

Snowden, Dr. J. R. Arters, Dr. D. C. Galbraith; State delegate, Dr. Robert Crawford.

Dr. Peter Faulkner came to Franklin in 1820, where he labored in his profession faithfully for some years, later removing to Erie, where he lived to an advanced age.

Dr. George R. Espy brought with him to Franklin, in 1820, the enviable distinction of an academic education and professional advancement. Through personal and political popularity he was elected to the State Legislature and later was made auditor-general under Governor Porter. He later removed to Iowa and engaged in merchandising.

Dr. Nathaniel D. Snowden, of Harrisburg, located in Emlenton in 1828, and two years later removed to Franklin. He endeared himself to a large circle of friends and patients.

Dr. J. Bascom located in Franklin in 1831. He was highly recommended through former New York affiliations and left a reputable name as a man and physician.

Dr. William C. Evans, son of Colonel John and Rachel (Connelly) Evans, was born at Franklin in 1829. He was a graduate of the Western Reserve Medical College, practiced for a time in Franklin, and afterward made his home at Erie. He enjoyed the distinction of being the first master of Myrtle Lodge of the Masonic fraternity.

In 1834 Dr. B. Gillett removed from Titusville, Crawford County, to Franklin, where he continued a successful practice for nearly fifty years.

Dr. George W. Connely read medicine with Dr. Gillett and practiced in Franklin for several years, when he retired from the profession to take the position of commissioners' clerk and prothonotary.

Dr. Walter L. Whann practiced many years at Franklin. In the years 1866-67 he represented the county in the State Legislature. At an advanced age he removed to California.

Dr. S. G. Snowden, son of Dr. N. D. Snowden, spent his life at Franklin; he was a most capable physician, who enjoyed a large practice.

Dr. Walter S. Welsh, of Franklin, was a native of Butler County. He was appointed a surgeon of the West Virginia Infantry during the Civil War.

Dr. D. C. Galbraith was born in Lawrence County, in 1841. He served as a surgeon in General Butler's command during the Civil War and located in Franklin in 1871.

Dr. John B. McMillan, son of William and Margaret (Robb) McMillan, was born in Mercer County. He began practice in 1850, being associated with his brother, Dr. Andrew J. McMillan, at Clintonville, Venango County. In 1851 he married Mary, daughter of Judge David Phipps.

Dr. Isaac St. Clair was for many years a practitioner at Franklin, the firm name of Drs. Borland and St. Clair being widely and favorably known.

During the period from 1820 to 1850 several physicians practiced within Venango County, including Drs. Gilfillan, Downing, Follitt, Powell, Davies and Wynne, all of whom were no doubt a credit to their noble profession, but of whom we have no information.

Dr. John R. Borland, for sixty-five years a practicing physician, died at his home in Franklin, December 26, 1916, in his eighty-ninth year. His health and activity up to almost the last day of his life was remarkable. A farmer's son, at the age of sixteen he began reading textbooks on medicine. Following the procedure of those times, he entered the office of a distinguished practitioner, Dr. J. R. Andrews, of New Vernon, Pennsylvania. In 1851 he opened an office of his own in Harlansburg, Pennsylvania, later taking a course at the Philadelphia University of Medicine and Surgery. The year of his graduation (1865) he entered business in Franklin with Dr. Isaac St. Clair as his partner. For one year, 1879, Dr. Borland occupied the chair of Theory and Practice in the Reform Medical College at Macon, Georgia, and was chosen dean of the faculty. Finding the remuneration insufficient for the support of himself and family, at the end of the year he declined reelection, and returned to Franklin. He continued his office practice up to almost the day of his death. Dr. Borland was noted for his interest in the activities of his time outside of his profession, and often addressed meetings on political or economic subjects. He was repeatedly the nominee of the Prohibition party for public office. A son, James B. Borland, was the founder of the "Franklin Evening News," February 18, 1878, which was consolidated with the "Venango Daily Herald," May 5, 1918, and since published as the "News-Herald," one of the best newspapers in any small city of the country. James B. Borland died May 19, 1939. Nettie Borland, a daughter of Dr. Borland, now resides at the Borland homestead, just across the street from the home of the author.

Dr. John B. Glenn was born December 2, 1838, in Frenchcreek Township, Venango County. He was educated in the common schools of that time and in the Utica Academy. He taught district school a number of years; studied law a short time, at Franklin, in the office of S. C. T. Dodd, in 1861; enlisted in the army, June 1, 1861, Company C, 10th Pennsylvania, R. V. C., and served in that organization as a soldier until June 2, 1864, participating in most of the battles in which the regiment engaged during his three years' service. He studied medicine with Drs. Cochran and Johnston, of Cochranston, Crawford County, and attended medical lectures at the "Cleveland Medical College," at Cleveland, Ohio, in the winter of 1866-67. He began the practice of medicine in March, 1867, with Dr. D. C. Galbraith, at Waterloo (now Polk); removed to Rockland in the fall of 1867, and after practicing there twenty years, removed to Franklin. He became a member of the Venango County Medical Society in 1867. He graduated from Jefferson Medical College, Philadelphia, in March, 1872, and was a life member of the Alumni Association of that college. He was appointed a member of the Board of Medical Examiners for Pensions by President Arthur. He served twelve years as physician to the Venango County Poorhouse and eight years as jail physician at Franklin. His passing removed from Franklin a very kindly gentleman and a faithful practitioner of medicine.

Dr. Robert Crawford, born May 16, 1815, at Omagh, County Tyrone, Ireland, came to America with his parents in 1821, and during his boyhood lived at Pittsburgh and Clinton, Allegheny County, Pennsylvania. He acquired his early education in Pittsburgh and began to read medicine there with Dr. John Wilson, but being obliged to leave the city because he had stolen a body for purposes of dissection made his way on foot to Cincinnati, Ohio, where he continued his medical studies, attending lectures at the Ohio Medical College and studying with Dr. Gross. In May, 1837, he came to Coopers-town, Venango County, where he made his permanent home, and forty years later it was said of him that he had ridden more miles and visited more patients than any other physician in western Pennsylvania. He graduated from the Ohio Medical College in 1845, and received the degree of Doctor of Medicine from the University of Pennsylvania in 1857; was a charter member of the Venango County Medical Society and served as president; was a prominent member and vice-president of the Pennsylvania State Medical Society; and a life member of the American Medical Association. For over twenty years he was censor of the medical department of Wooster Univer-

sity, Ohio, and he served a considerable period as United States pension examining surgeon. He died in 1892.

Dr. John Kelly Crawford, son of Dr. Robert Crawford, attended Allegheny College and then studied medicine with his father, later entering the University of Pennsylvania. He commenced practice in Cooperstown, was associated with Dr. Jennings at Titusville, and eventually returned to the University of Pennsylvania, graduating therefrom in 1869. He then practiced in Cooperstown, and was particularly well known as a surgeon. He took several postgraduate courses.

Dr. John A. Ritchey, son of Thomas and Mary (Calhoun) Ritchey, was born November 28, 1840, in Armstrong County, Pennsylvania, and died May 4, 1906, at his home in Oil City. In 1861 he enlisted in Company K, 155th Regiment, Pennsylvania Volunteers. At the close of the war he studied medicine and was graduated from Jefferson Medical College, Philadelphia, in 1871. He located in Oil City, where he practiced continuously, being for many years associated with Drs. C. W. Coulter and G. W. Magee under the firm name of Ritchey, Coulter and Magee. In late mid-life he married Hannah Etta, daughter of Dr. Robert Crawford. Dr. Ritchey's professional life was contemporary with that of Drs. T. R. Egbert, F. W. Davis, T. C. McCullough and A. F. Coope, all residents of Oil City and all of medical ability and social standing.

Dr. William A. Nicholson, son of Thomas and Mary Jane (Carver) Nicholson, was born March 17, 1850, at Pleasant Grove, Belmont County, Ohio, and was reared in the adjoining county of Harrison, where he acquired his earlier education in the public schools of Harrisville. He completed his medical studies in the University of Michigan, from which he received the degree of Doctor of Medicine, March 29, 1871; on June 4, 1873, moving to Venango County, Pennsylvania. Resuming his studies in October, 1875, at New York, he graduated from Bellevue Hospital Medical College, March 1, 1876, and interned in Mount Sinai Hospital as senior assistant on the house staff for one year. On May 6, 1886, he located permanently at Franklin. During the spring sessions of the Philadelphia Polyclinic and College for Graduates, in 1886, 1890 and 1895, he reviewed his studies in general medicine at that institution. He was a member of the Venango County, Pennsylvania State and American Medical societies.

Dr. George W. Dille was born January 1, 1849, at Mentor, Lake County, Ohio, but from childhood had lived at Cooperstown, Venango County. He went to the local schools and had a year's course in

pharmacy at Ann Arbor, Michigan, during the next five years being associated with his father, Dr. James Madison Dille. He then attended the University of Pennsylvania, at Philadelphia, until called home by his father's illness to take care of the practice. Later he entered Western Reserve University, at Cleveland, Ohio, graduating in 1872. He was president of the Venango County Medical Society in 1881 and censor in 1882, and was a member of the Pennsylvania State Society and the American Medical Association. He was surgeon of the National Guard for nine years, and for over twenty years was a member of the school board.

Dr. Joseph William Leadenham, of Franklin, was born January 16, 1855, at Weatherly, Pennsylvania, a son of Joseph W. and Elizabeth (Roberts) Leadenham. He had for preceptors Dr. J. B. Tweedle and Bellevue Hospital College. He graduated at Long Island College Hospital in June, 1876. His postgraduate studies were pursued at New York City; Brooklyn, New York; Philadelphia, and London, England. On April 22, 1878, he married L. May Smith, at Knox, Clarion County, Pennsylvania. In 1910 he retired from active practice.

Dr. F. M. McClelland was born December 1, 1859, in Mill Creek Township, Mercer County, Pennsylvania, where he remained on his father's farm until twenty-five years old, studying in the local schools, high school at Utica, McElwain Institute at New Lebanon, Mercer County, and Edinboro. He taught public school for seven years, beginning in 1878; read medicine with Dr. D. S. Brown, of Utica, and in 1885 entered the medical department of Western Reserve University, in Ohio, graduating in 1887, with the class prize in *materia medica* and therapeutics. He took up the practice of his profession in Utica, where he served for many years as school director, and was interested in farming and oil production. In 1919 he was secretary of the Venango County Medical Society.

Dr. Thomas Armstrong Irwin was born in Wolf Creek Township, Mercer County, Pennsylvania, October 13, 1862, son of Thomas S. and Dorothy Ellen (Hosack) Irwin. He attended the common schools in his native township, high school at Mercer, and Grove City College; he received the honorary degree of Master of Arts from Grove City College; entered Jefferson Medical College, 1885; graduated in medicine, Chicago Homœopathic Medical College, February 21, 1888; located in Franklin, March 8, 1888. He engaged in general practice for seven years; special work in New York Post Graduate Hospital, 1895; married to Helen Isabell Patterson, December 19,

1895; took passage for London, January 1, 1896; King's College Hospital and St. Bartholomew's Hospital; graduated from London Homœopathic Hospital and London Throat Hospital; from London went to Vienna, Austria, taking up special instruction at the Government Hospital, which contained five thousand beds. He returned to Philadelphia, October, 1896, and entered Philadelphia Polyclinic Hospital and later the New York Polyclinic, graduating from both hospitals. Returning to Franklin, he resumed the active practice of medicine, making chronic diseases a specialty. He was a member of the Venango County and Pennsylvania State Medical societies and of the American Institute of Homœopathy.

Dr. George W. Magee was born July 27, 1864, in Plaingrove, Lawrence County, Pennsylvania. He attended public school and private schools in that locality, graduated as a Master of Arts from Grove City College in 1886, and received his degree of Doctor of Medicine from Western Pennsylvania Medical College, March 28, 1889. He practiced three years at Seneca, Venango County, removing to Oil City in 1892 and forming a partnership with Drs. J. A. Ritchey and C. W. Coulter. Dr. Coulter retired in 1897, and the other two members practiced together until 1903, after which Dr. Magee had his own office at Oil City until his death, July 3, 1914. In 1911 he studied abroad, including a special vacation course at the Edinburgh Post Graduate School, in connection with the University and Royal College. He was a member of the Oil City Medical Society; Venango County Medical Society; Pennsylvania State Society, and American Medical Association; member of the board of examiners of the Oil City Training School for Nurses; surgeon of the Erie Railroad for over ten years and served as a trustee of the Polk State School. He also served as president of the Oil City School Board, and represented the district two terms in the State Legislature.

Dr. Lewis E. McBride, son of Robert K. and Jane (Perry) McBride, was born April 7, 1869, in Scrubgrass Township, Venango County. His literary education was obtained in local country schools and Grove City College. He taught school for a time and began his medical education in Western Pennsylvania Medical College, at Pittsburgh, in 1892, taking a final degree of Doctor of Medicine from the Chicago Homœopathic College in 1895. He qualified to practice before the Pennsylvania State Board of Examiners, at Philadelphia, in the same year. He immediately began the practice of general medicine at Franklin, specializing in surgery after two courses of surgical instruction in the New York Post Graduate School of Medicine. He

was a member of the Clinical Congress of Surgeons of North America, and of the Venango County, Pennsylvania State and American Medical societies. In 1895 he married Emma Lamberton, of Franklin. He died March 15, 1932, and is survived by his widow, a son and daughter.

Dr. James B. Siggins, son of William and Jane (Hunter) Siggins, was born at West Hickory, Pennsylvania. He received his education in the common schools, the Edinboro State Normal School and Allegheny College, from which latter institution he received the degree of Bachelor of Arts in 1915. In 1883 he graduated from the medical department of the University of Michigan, being president of his class. In 1896 he located at Oil City, where he engaged in the general practice of medicine, making surgery a specialty. He was a member of the County, State and American Medical societies.

Dr. Alexander McLeod Brown was born at Pleasantville, Venango County, May 8, 1868. He graduated from Amherst College in 1892 with the degree of Bachelor of Science. He was an instructor in Lakewood School for Boys in 1892-93; also in Shadyside Academy, Pittsburgh, in 1893-94. He graduated as Doctor of Medicine from the University of Pennsylvania in 1898; was an interne in Atlantic City Hospital and Altoona Hospital in 1898-99; began practice at Franklin in 1899. In 1905 he married Helen, daughter of Judge Christopher Heydrick. He was a member of the County, State and American Medical societies.

Dr. C. M. Wilson, son of John and Sarah A. Wilson, was born at Millbrook, Pennsylvania, October 10, 1855. His earlier education was obtained at Millbrook High School. In 1876 he graduated at the Cincinnati College of Medicine and Surgery. In 1877 he located at Mechanicsville, now Wesley, Pennsylvania, where he practiced twenty-three years, in 1900 removing to Franklin. On June 7, 1883, he married Anna B. Shelley. In November, 1894, he began a general review course at the New York Post Graduate School of Medicine. He was surgeon for the New York Central Railroad for approximately thirty-five years and was actively engaged in practice until his death on November 6, 1939, at the age of eighty-four. He was a member of the County, State and American Medical societies.

Dr. Harry F. McDowell, a much-valued friend of the author and his family, was born March 11, 1867, at Tarentum, Pennsylvania, and died in 1930. In 1893 he received the degree of Bachelor of Arts from Princeton University, and in 1895 the degree of Doctor of Medicine from the University of Pittsburgh. In 1895-96 he was

a resident on the house staff of Western Pennsylvania Hospital at Pittsburgh. In 1896 and 1897 he was a resident physician at Dixmont Hospital. During the years from 1897 to 1901, inclusive, he was a resident physician at the Polk State School. In 1901 he located at Franklin, where he continued in practice until his death. He was a member of the County, State and American Medical societies.

Dr. John Irwin Zerbe was born March 9, 1879, at Sacramento, Pennsylvania. He was educated in the public schools of Hubley Township, Valley View High School, and Millersville State Normal School; graduated from Perkiomen Seminary in 1899, and from Medico-Chirurgical College of Philadelphia in 1907. He taught in the public schools of Schuylkill county seven years, and one year in Montgomery County; taught natural science one year in the Perkiomen Seminary; was demonstrator in the Pathological Laboratory of the Medico-Chirurgical College for two years, and an interne in the hospital of that same institution one year. He was a special commissioner from the Pennsylvania State Health Department for the "Mosquito Survey" in the summer of 1906. He was assistant physician at the Polk State School for three years and, in 1910, located in Franklin, where he practiced until his death in 1940.

Dr. Charles H. Ashton was born at Beaver Falls, the family shortly thereafter moving to New Castle, Pennsylvania. He received a general education in the public schools of New Castle and Bullion, Pennsylvania. In 1905 he obtained the degree of Doctor of Medicine from the University of Maryland Medical School, and located in Franklin, where he practiced general medicine five years. With the view of specializing in diseases of the eye, ear, throat and nose he attended the New York Post Graduate School of Medicine nine months; had charge of the DeMilt and Bartholomew clinics six months; followed the clinics of Manhattan Eye and Ear Hospital and of the New York Eye and Ear and Polyclinic hospitals; later he completed a nine months' course at the University of Vienna, a shorter special course at the University Hospital of Munich, spent one month at Berlin and one month at Paris, finishing with extended study in the Royal Ophthalmic Hospital of London. He was a member of the County, State and American Medical societies. He practiced as an eye, ear, throat and nose specialist in Franklin until his death, November 23, 1940.

Dr. Ardur Claire Thompson, son of Dr. James C. Thompson, was born June 2, 1885, at Sandy Lake, Pennsylvania. He obtained his general education from Franklin High School and Bucknell College.

In the spring of 1909 he graduated from the University of Michigan with the degree of Doctor of Medicine. After a year of internship in the Lake Side Hospital of Cleveland, on the surgical staff, he returned to Franklin and began practice. On October 2, 1915, he married Louise Mullins, of Franklin. In June, 1917, he volunteered in the American Expeditionary Forces and sailed for France, September 8, 1917, where he was assigned to service in Base Hospital No. 4, under the supervision of Major George W. Crile, of Cleveland, the celebrated surgeon and founder of the Crile Clinic, who died recently. After the war, Dr. Thompson continued his practice of medicine in Franklin, specializing in surgery, until his death on October 8, 1937. He was a member of the County, State and American Medical societies.

In 1873, Dr. Louis H. Christie and the author's father, Joseph Riesenman, came to Franklin from Petroleum Center, the former to engage in the practice of medicine, and the latter as a pioneer pharmacist.

Mention has been made of several doctors who attended the Medico-Chirurgical College in Philadelphia, now the Post Graduate Medical School of the University of Pennsylvania. A native of Franklin, Dr. Seneca Egbert, son of Dr. A. G. Egbert, an early physician of Franklin, was for years Professor of Hygiene and Sanitation and Dean of this institution. He was an able man in his chosen profession and his memory is highly revered at the university. He married the daughter of another early physician of Franklin, Dr. Stephen Bredin, a most faithful doctor of medicine and a lovable character.

Other physicians who practiced in Venango County and personally known by the author, included: Drs. Frederick W. Brown, of Franklin, who engaged in general practice and specialized in neurology, and who was twice elected to the office of mayor; Charles H. Brown, for a number of years city health officer of Franklin; Henry P. Hammond, of Franklin, who in addition to medicine was much interested in music; Philip J. Sheridan, of Franklin, and later of Oil City; James D. Blair, Harry S. Stone, Edward P. Wilmot, J. M. Douds and Edwin W. Moore, all of Franklin; Edward J. Currin, A. W. Goodwin, A. W. Ricketts and S. W. Sellev, all of Oil City.

Personal mention of members of the medical profession has been confined to those who have passed on to their eternal reward, and of these there were many more. Of the physicians in practice today, it may be truthfully said that no section of the country has more sincere, capable, earnest and ethical practitioners of this noble profes-

sion than has northwestern Pennsylvania. As a pharmacist in his early active life, and with constant association with the medical profession ever since, the author has maintained close contact with the members of the profession, and he cherishes fond memories of many of those who have passed on, some of whom literally wore themselves out in ministering to the sick, and he holds in high esteem the men who today, although not subjected to many of the hardships endured by their early predecessors, in a very fine manner are perpetuating the proud early tradition of medicine in the region.

In his "History of Erie County," John Elmer Reed says:

"It will be beyond the scope of this article to cover the subject in anything like a proper and exhaustive way, and so we will not attempt to do so. But the medical profession of this county is entitled to more than honorable mention in this, or any other, narrative having to do with this county. A more devoted and self-denying group of professional men would be hard to find anywhere. Their professional abilities stand before the world unchallenged for skill, care and results."

Mr. Reed gives Dr. J. C. Wallace as the first medical man to settle in Erie. We have already related that, after engaging in practice in Franklin for three years, Dr. Wallace removed to Erie, which must have been in 1800, as he arrived in Franklin late in December, 1796.

In 1811 a second physician arrived and settled in Eagle Village, now South Erie. This was Dr. Plara Thayer, followed soon after by his brother, Dr. Albert Thayer.

Dr. Asa Coltrin followed them about 1815, and then came Dr. Peter Christie, a surgeon in the United States Navy. In 1822 came Dr. William Johns, and in 1825 Drs. Taber Beebe and Elijah Beebe. Dr. Peter Faulkner came to Eagle Village from Franklin, in 1825, and his two sons later followed their father in his profession at Erie; they were Dr. William Faulkner and Dr. Robert Faulkner. Almost with Dr. Faulkner came Dr. Jacob Vosburg, and Dr. Sanford Dickinson came in from Wattsburg in 1840.

At North East, Dr. James Smedley appeared at a very early day, and Dr. Ira Sherwin settled at Harborcreek in 1825, Dr. W. T. Bradley at Wesleyville in 1840, Dr. Rufus Hills at Girard, Dr. M. C. Kellogg at Erie, and later in Albion; Drs. Reuben Brinker, Daniel D. Franklin, Manhattan Pickett, D. C. Storer, Henry S. Tanner and others at Corry; Drs. John W. Jarvis, P. P. Fisher and D. R. Wag-

goner at McKean; Drs. Samuel F. Chapin, G. Thickstun, William C. Tracy and D. T. Bennett at Wattsburg; Drs. M. A. Millard and M. D. Satterlee at Fairview; Drs. T. J. Kellogg, A. G. Ely, A. R. Smith, I. N. Taylor and Helen M. Weeks at Girard; Drs. O. L. Abbey, James F. Read, Stephen R. Davis, Mrs. Stephen R. Davis, Curtis B. Goucher, L. D. Rockwell, Alfred C. Sherwood and others at Union City.

The following practitioners also settled in this region: Drs. James Smedley, John K. Griffin, L. G. Hall, A. B. Heard, D. D. Loop, Burton H. Putman, A. J. Sears, George B. Stillman and Mullin A. Wilson with others at North East; Drs. P. D. Flower, O. Logan and James Skeels at Albion; Drs. T. W. Barton, John W. Bowman, Frank L. Clemens and others at Waterford; Drs. George Ellis, John Ross, Ransom C. Sloan, Joseph R. Hewett, O. O. Blakeslee, Lamarr V. Knapp, Charles N. Moore and others at Springfield; Drs. G. W. Wilson, William P. Biles, John H. Kirk and others at Mill Village; Drs. Henry R. Terry, Willard Greenfield, Truman Hawkins, S. B. Hotchkiss, George M. Cole, Joseph C. Wilson and others at Edinboro; H. R. Hayes, Amity Township; Johnson Wright, Franklin Township; Barker A. Skinner, Elgin; J. L. Bennett, East Greene; George Wright, Lockport; M. B. Cook, Harborcreek; W. V. Blakeslee, Concord Township; James G. Leffingwell, Miles Grove (now North Girard); M. M. Moore, Wesleyville; Martin V. B. Johnson, Wellsburg; Mary Steward, Wellsburg; Drs. Battles and J. W. Lloyd, at Westminster. Many others besides the above are entitled to notice.

The first medical society in the county was organized in 1829; it was succeeded by the Erie County Medical Society, established in 1841. The Homœopathic Medical Society was organized July 1, 1891.

Homœopathy was introduced into the county by Dr. Bianchini, an Italian, about 1840. Dr. Nelson Seymour came soon after, followed by conversion of Dr. Peter Faulkner from the allopathic to the homœopathic system of medicine, and his son Robert followed in his footsteps.

Several of the Erie County medical men have attained something of honor and distinction in the service of their fellowmen. Dr. E. W. Germer was a notable example in the public service he gave Erie City and, incidentally, the county at large, as the first health officer under the newly created office. He took a wonderful interest in the public health, and in the means to promote it. To the people of his day he was regarded as eccentric and arbitrary where health matters were

involved; but he usually found the means of carrying out his wishes, which have been largely followed in more recent times. The city of Erie has an efficient and active board of health at this time, which publishes a monthly magazine, "Erie's Health," devoted to community health problems. As one engaged in the work of public health conservation, the author well knows the many difficulties encountered in securing the coöperation of the public in the important effort of conserving the health of the people, man's most valuable asset.

Two Erie medical men became manufacturing druggists: Dr. John S. Carter produced Carter's Smartweed Extract and Dr. P. Hall produced Hall's Catarrh Balm and other remedies. Both names acquired national recognition.

Mr. Reed states:

"Dentists did not appear in the county at so early a day, so far as we are able to learn. When they did come, it was with the old-fashioned instruments, the cork-screw pullers, hammers and chisels, which were then deemed the correct thing in dental surgery. And by the way, they were then called 'Surgeon Dentists,' and the first of the sect were Drs. W. C. Bunnell, M. Chapin, O. L. Elliott and W. E. Magill. Later research has very much refined the methods then in vogue, and with modern methods, systematic registration, and specialized training, the dentist of this county, and of the country at large, takes his place with the members of any of the other learned professions."

Erie is very fortunate in having today a corps of sincere and conscientious medical men, some of whom are widely known because of their specialized training and native ability.

On October 26, 1940, a western Pennsylvania college which has been previously mentioned observed an occasion which deserves recognition. On the date mentioned, Washington and Jefferson College at Washington, Pennsylvania, honored three heroes of the dramatic battle to conquer yellow fever when a new chemistry building was dedicated and a half-million-dollar addition to the campus was made available for use.

Dr. Jesse W. Lazear, a former student of the college and a former resident of Pittsburgh, who in 1900 gave his life in successful experiments in Cuba in the fight against yellow fever, and John R. Kissinger and John J. Moran, two of the soldiers who volunteered for the experiments and lived, were the central personalities of the homecoming Founders' Day celebration.

The new chemistry building was named the "Jesse W. Lazear Chemistry Hall." Dr. Lazear died after being bitten by the carrier mosquito "stegomyi" during experiments to determine the methods by which the yellow fever plague spread. Like many others, he gave his life that others might live.

The human family owes a great debt of gratitude to the brave and unselfish scientists who down through the ages, and often with no encouragement, but opposition even from fellow-scientists, have finally discovered means of producing toxins, anti-toxins, serums and various biological products for the prevention and cure of various diseases.

When the eminent bacteriologist and army officer, Walter Reed, who died in 1902 at the comparatively early age of fifty-one proved in Cuba the method of transmission of yellow fever, he discarded the theory that the disease was transmitted by fomites in bedding and clothing, and revived the theory of a former bacteriologist, Finlay, that it was transmitted by the mosquito, a theory for which Finlay had been laughed to scorn by the scientists of his day and, discouraged, he had gone into seclusion.

In 1796, an humble country physician in England, Dr. Edward Jenner, completed his experiments which resulted in the discovery of anti-smallpox vaccination, the result of twenty-six years of patient research and experimentation, during which time, with confidence in his theory, he inoculated his own son to demonstrate the efficacy of his theory. Due to our school vaccination law, Pennsylvania had but two cases of this disease in eight years, despite the incidence of the disease in epidemic proportions in neighboring states, and these two cases were infected in a western New York town. The two cases referred to occurred in 1938, and the State was again free from the disease until an infected woman from Ohio attended a large Amish wedding on November 23, 1942, in Mifflin County, resulting in the infection of a considerable number of people. All those affected were over fifty years of age, except some children below school age, clearly demonstrating the value of vaccination, and still we have ignorant and stubborn persons who oppose vaccination.

Mme. Curie nearly died from starvation because she lacked the income to provide proper nourishment and received little encouragement while patiently working over a period of many years in scientific research, processed many tons of earth, finally isolated uranium, then in 1898, discovered polonium, which she named in honor of her native Poland and shortly thereafter, gave to the world radium which has saved so much human life and has relieved so much suffering.

The great French chemist, Louis Pasteur, with his wife and daughter, had to hide out in one of the isolated provinces of France to avoid imprisonment on account of his theories, but today, much of modern medicine is founded upon his theories and he gave to the world a cure for hydrophobia infection and other diseases and invented the method of pasteurization which renders bacteria sterile by long exposure to heat and oxygen.

The Pennsylvania Department of Health is taking every precaution to safeguard the health and the lives of the citizens of our State and, as the result of these efforts, many diseases which formerly appeared in epidemic proportions, are now rarely encountered. Dr. Adolph Rumreich, chief of the Pneumonia Control Division of the United States Public Health Service, two years ago stated that Pennsylvania's pneumonia control program, credited with substantially reducing the death rate from this disease, was "the finest and most effective in the United States." Dr. Dale C. Stahle, director of the State's pneumonia control division, stated two years ago, that "Ten years ago Pennsylvania had the eighth highest death rate from pneumonia in the United States. Today it has dropped to forty-third place."

The young men now entering military service are getting protection against health hazards such as smallpox, typhoid, diphtheria and tetanus which they might have to face unprotected in civil life, because the army realizes the terrific toll of death that disease has enacted among soldiers in former wars. Typhoid fever is not so much of a risk now in cities or other communities where water, milk and food supplies are kept safe from contamination, and where health authorities watch over typhoid carriers to prevent their spreading the disease, but where these conditions do not exist, there is much more danger. Besides the inoculation of soldiers now, army units carry mobile chlorinization plants for the treatment of water to be used by the soldiers.

Several million French, Canadian, British and Italian soldiers received the tetanus toxoid immunization in the early years of the present World War with no reported cases of tetanus for any of those immunized. The French also immunized even some sixty thousand cavalry horses and not a horse suffered tetanus thereafter, whereas previously the disease had claimed forty to sixty victims for its annual equine death toll. It is an interesting fact that during the First World War, when we had thousands of cases of influenza here at home and many deaths, among the thirty thousand men in the 28th Division of

the army in France, there was not a single case of influenza or pneumonia.

Dr. Thomas R. Kennedy located in Meadville in 1795 and for twelve years was the only physician in that town. In 1807 Dr. Daniel Bemus opened an office there and in 1813 took over Dr. Kennedy's practice, when the latter died.

In 1823 Dr. William Woodruff and Dr. John Sprague located in Meadville. Dr. Ransom Warner, the son-in-law of Dr. Sprague, practiced there for a few years but later moved to New York.

Dr. C. M. Yates opened an office in 1826 and practiced for about twenty-five years. Dr. Reynell Coates, an Allegheny College professor, practiced medicine there a few years. Dr. Edward Ellis located there in 1826 and was associated with Dr. Bemus for a few years, but later opened his own office at the corner of Water and Walnut streets. He ministered to the sick and suffering of Meadville for more than half a century.

Dr. Alexander McLeod was associated with Dr. Bemus for a few years after 1833 and after practicing medicine for a number of years became a minister of the Episcopal Church, and a chaplain in the army.

On June 8, 1881, the first general medical registration Act was passed. Registration continued to be required in the counties until 1911, when the Bureau of Medical Education and Licensure took over the registration of practitioners of medicine and surgery.

Among the physicians practicing in Meadville in 1881 were: Dr. Anson Parsons, who was a graduate of the University of Maryland, class of 1865, and Dr. Susan F. Rose, who was graduated from the Homœopathic Hospital College, Cleveland, Ohio. Dr. Alexander Thompson was a graduate of the Eclectic Medical Institute, Cincinnati. Dr. Edward Dewey, who was graduated from the University of Michigan in 1863, was a very successful physician and was an exponent of the "no breakfast" theory.

Dr. T. B. Lashells was graduated from the medical department of Columbia College, Washington, District of Columbia, in 1862, and, after an extensive practice as a surgeon in the Union Army, came to Meadville and became one of the best known and most successful physicians ever to practice there. His son, Dr. Edward Lashells, was in practice there for a few years, but later moved to Washington, District of Columbia, where he was connected with the Veterans' Bureau.

Dr. B. Brown Williams was one of the well-known physicians in Meadville in the later 1880s. He was graduated from the Eclectic

Medical Institute in 1860. Dr. Ellsworth S. Ellis was graduated from the College of Physicians and Surgeons in New York City in 1876.

Dr. John N. Pond was graduated from the Western Homœopathic College, Cleveland, in 1865. Dr. John W. Haak was graduated from the University of Leipzig, Germany, in 1838 and came to Meadville in 1846 and continued in practice for about forty years.

Dr. Almon B. Coulter was graduated from the Western Reserve University in 1882. Alfred W. Green was graduated from the University of Pennsylvania in 1844. Dr. C. P. Woodring, born in Meadville in 1853, was graduated from Allegheny College and New York University. He practiced until 1908 and died in 1911.

Dr. D. L. Collins was graduated from Jefferson Medical College and located in Meadville in 1888 after having practiced in Conneautville, Crawford County, for ten years.

Dr. C. W. Thompson was born in Pittsburgh in 1858, graduating from Allegheny College and Western Reserve University in 1882. He practiced in Meadville for many years.

Dr. Harry G. Chamberlain attended Rush Medical College in Chicago and located in Meadville early in the 1890s. He continued in practice for over twenty years. Dr. J. K. Roberts began the practice of medicine in Meadville about 1904, after being graduated from Western Reserve University.

Dr. Winters D. Hamaker was born in Bedford County and was graduated from Washington and Jefferson College in 1880 and from the University of Pennsylvania in 1884 and located in Meadville in 1886. He was a member of the Board of Medical Examiners for many years. He was very prominent in civic as well as medical affairs. In 1915 he left Meadville to live in California.

Dr. C. C. Hill was graduated from the Bellevue Hospital Medical College in 1874 and after practicing in Ohio several years he took postgraduate work in eye, ear, nose and throat and opened offices in Meadville as a specialist in 1888.

Dr. D. G. Snodgrass was graduated from Starling Medical College in 1882 and, after practicing in Conneaut Lake and West Middlesex, he came to Meadville in 1902. Dr. F. L. Nisbit located in Meadville after he graduated in 1887 and carried on a very successful practice.

Dr. G. D. Thomas, a graduate of Jefferson Medical College, began practice in Meadville in 1908 after having been located in Chicora, Butler County. He was treasurer of Allegheny College for

several years and was also a member of the Meadville School Board. He died in 1932.

Dr. C. C. Laffer was born in Meadville and was graduated with honors from the University of Pennsylvania in 1893. Dr. Laffer was secretary and treasurer of the Crawford County Medical Society for thirty years. He continued in practice until his death in 1928.

Dr. Blanche Best was the daughter of Dr. David Best, who died in 1887. Dr. Best was graduated from Allegheny College in 1897 and received her Doctor of Medicine degree from the Trinity University of Toronto in 1899, and opened an office in Meadville in 1904.

Dr. Mary D. Mumford received her degree from Homœopathic Medical College of Cleveland in 1901 and located in Meadville for general practice until her marriage in 1914 to C. Theodore Campbell.

Dr. N. B. Noll was graduated from Jefferson Medical College and after practicing in Cochranon and Greensburg came to Meadville in 1910.

Dr. O. H. Jackson was born at Atlantic in 1875 and attended Grove City College and, after receiving his Doctor of Medicine degree from St. Louis University, located in Meadville in 1907. He was a member of the American, State and County Medical societies. He died in 1935.

Dr. Chas. K. Ferer was graduated from Lafayette College in 1901 and received his medical degree from Medico Chirurgical College in 1904. He did general practice in Meadville until his death in 1936.

Dr. W. B. Skelton was born in Buffalo and received his Doctor of Medicine degree from the University of Michigan in 1904. He located in Meadville in 1907. Dr. E. E. Brophy attended the University of Baltimore and graduated in 1905 and also received a degree from the University of Pittsburgh in 1907. He practiced in Meadville until his death.

The Crawford County Medical Society was organized in 1866 with the following members: J. C. Cotton, T. B. Lashells, William Church, David Best, J. P. Hassler, E. H. Dewey, D. M. and A. C. Calvin.

An earlier medical society had been organized in 1841 with a membership of ten. The physicians comprising this membership were Charles M. Yates, James White, A. Yates Harlow, Edward Ellis, Philip Spencer, William Woodruff, Rufus Ashley, Joseph Bloomfield, Ebenezer Hyde and H. Boyd.

In February, 1878, the Homœopathic Society was started, but this has since been absorbed by the former. In May, 1882, a meeting of the Pennsylvania Medical Society was held in Meadville. The following year there were eighteen members of the Crawford County Medical Society. In 1938 there were over sixty members of the Crawford County Medical Society and about thirty practicing physicians in the city of Meadville.

Dr. Thomas R. Kennedy, Meadville's pioneer physician, was a very public-spirited gentleman. Among his valuable contributions to his adopted town was the building of the Mercer Street Bridge about 1807.

Epidemics—In the early days, as might be expected, with its lack of sanitary arrangements, the region was subject to contagious disease, and naturally, epidemics occurred in the more populated places.

In 1832 the Asiatic cholera made its appearance in Philadelphia and New York, and occasioned great alarm in Pittsburgh. In June, 1832, the ministry of Pittsburgh assembled and recommended a day of fasting, humiliation and prayer "that God avert the danger threatening the country from Asiatic cholera." The city authorities passed ordinances for a rigid enforcement of sanitary measures. Drs. James Agnew, Adam Hays, James Speer, S. R. Holmes and H. D. Sellers were appointed consulting physicians to the Sanitary Board of which Samuel Pettigrew was president and E. J. Roberts, secretary. At this time the Sanitary Board had not been incorporated and was functioning only by appointment of the city council. Dr. Jonas R. McClintock was appointed physician. Steps were taken to reorganize the Sanitary Board and to establish a temporary free dispensary. Concert Hall on Penn Avenue was engaged for the latter purpose. Appropriations were made to put the city in the best possible condition to fight this infection.

On October 22, 1832, a Negro from Cincinnati died of cholera in Pittsburgh and the infection began to spread in spite of the utmost exertions of the physicians and the city authorities. By the twenty-sixth of the month, five cases had appeared and three deaths resulted. During the next two months from twenty-five to thirty-five persons died but the scourge was then checked. In May, 1833, it reappeared, although rigid and systematic precautions had been taken in its prevention. From May to June twenty-fifth there appeared seventeen cases, of which five were outsiders, and by July first eight deaths had occurred. The epidemic seemed to have gained a strong foothold by

this time, as it was stated in the newspapers of July fifth that twenty-three residents and five outsiders had died. Dr. James Speer was very active and prominent as the hospital doctor at this time. Trouble arose between the practicing physicians and the Sanitary Board. In the autumn of 1832 the latter accused the former of neglecting to report cases of cholera which they encountered in their practice and repeated the accusation in 1833. In July Drs. Joseph Gazzam and E. D. Gazzam said: "Since the recent reappearance of the disease in Pittsburgh thirty-six cases of fully developed cholera have occurred in our practice. Of these, six cases are now remaining, five of which are convalescing and one doubtful. So far as our observation and experience extend the disease as yet is more manageable and more easy of cure than it was last fall."

The Board of Health pursued a course which was condemned by reputable physicians. In the autumn of 1832 the Gazzams reported a case and ordered the patient to the hospital. The Sanitary Board refused to accept the judgment of the physicians, using unnecessary and unjust measures in their observations and sent the health physician to examine the case and report thereon. The latter stated that it was a case of common cholera (*morbus*) whereupon, although five other reputable physicians corroborated the Gazzams' diagnosis, admission to the hospital was refused. This act roused the physicians, and thereafter they refused to report cases of cholera coming under their practice. They were sharply criticized by the Board of Health, whereupon Dr. Gazzam replied as follows: "We are not and never have been indisposed to give the public every information in our power in relation to the epidemic, but we cannot consent to modify, change or pervert our deliberate opinions respecting its true nature to gratify popular prejudices or to suit the crude and various notions of those who have no knowledge of the subject; nor can we consent to submit again our medical opinions or reports to the judgment and supervision of such tribunals."

In June, 1833, the churches observed a day of fasting, humiliation and prayer "that God would end the plague or pass it by Pittsburgh." Hydrants in all parts of the city were permitted to run one hour each day to cleanse the walks, gutters and streets. The building of the temporary hospital this year cost \$400. Thomas O'Neal was superintendent of the hospital; Drs. Armstrong and Bruce were hospital physicians, and Dr. Jonas McClintock health physician.

The "Gazette" said of the disease: "Wheeling, Maysville and Lexington, with a population not exceeding 18,000, lost more persons in

a single day than Pittsburgh and vicinity lost by the same disease (cholera in two years and two separate visits of the scourge). An experienced physician, says Dr. Diller, "assures us that he has never seen a genuine indigenous case of that loathsome disease, the itch, since he came here and that cholera infantum does not prevail here to one-tenth part of the extent in other towns East and West." "By the report of the health physician it appears that forty-four deaths occurred in this city and neighboring boroughs and villages since the end of May."

It is impossible to give the exact number of cases of cholera or the exact number of deaths because the newspapers deliberately suppressed the extent of the scourge and no other record is known to exist. Business was seriously interfered with, in fact was almost at a standstill, while the epidemic lasted. Probably a total of over one hundred cases were reported and seventy-five deaths occurred in 1833.

In 1848 the cholera again visited Pittsburgh. As before the newspapers suppressed the extent of the scourge. Business was wholly suspended and not a countryman could be seen on the streets. The "Commercial Journal" declared that little attempt had been made to clean the gutters and alleys. After from thirty to fifty people had died in Pittsburgh it suddenly broke out in Birmingham with such virulence that from August 11 to August 21, inclusive, eighteen deaths resulted and the people became terror stricken. Later Allegheny was visited and in the one day ending at six o'clock on the evening of August twenty-seventh ten persons died. In a short time the deaths in Allegheny numbered forty to fifty. It first appeared in Pittsburgh and then Birmingham and then Allegheny and other portions of the region. It is probable that from one hundred and fifty to two hundred persons died of the epidemic in 1849. In 1851 it again appeared but was vigorously confined and not many deaths resulted. About this time Dr. J. J. Myers was appointed by the Secretary of the Treasury, hospital physician of the Marine Hospital. In 1854 the community was again visited by cholera and the dreadful scenes of the former visitation were enacted with much greater mortality. Again the newspapers, through business motives, suppressed the extent and details of that memorable summer and fall. How many died cannot be learned, but the number approximated one thousand.

During the winter of 1845 many cases of smallpox appeared. Part of the old water works at Pittsburgh was fitted up for the reception of poor patients by the directors of the poor. The building was originally used as a coal shed and was walled up into one room, in which

were placed eight or nine beds and in one corner a stove, table and utensils, etc. The surroundings were poor, but the room was cheerful and comfortable. Aside from the rude temporary hospital of 1833, this was Pittsburgh's first structure for the care of the indigent sick. It was closed during the summer of 1846, but was opened again in the fall for the reception of patients. In the early years, all parts of the region, from time to time were subjected to smallpox epidemics, but for many years, as in the State throughout, the only incidence of the disease was occasional infection brought in from some other State, the result of the wise legislation for prevention of infection by the Commonwealth of Pennsylvania, and strict enforcement of the vaccination law.

In common with many other large cities, Pittsburgh had for many years a high death rate due to typhoid fever. This subject was argued for years and finally resulted in the erection of a filtration plant, from which time dates a very striking reduction of the death rate from typhoid fever. Dr. Diller says: "A large share of the credit for this sanitary reform belongs to the 'Pittsburgh Medical Review' and its editors, especially Charles S. Shaw, Eugene Matson and Adolph Koenig."

The town of Butler was afflicted with a very severe typhoid epidemic in the winter of 1903. There were 1,123 cases in the month of November, with twenty deaths. For a time, new cases were averaging twelve a day, and the total number of cases to December thirteenth was 1,254, with fifty-one deaths. Five deaths on Christmas Day brought the total of deaths to seventy-eight, one of which was a physician, several of the physicians of the town having fallen victims to the disease.

Clara Barton, president of the American Red Cross Society, with her aides, Dr. Hubell and General Seer, conducted a survey of the situation and, upon returning to Washington, issued from the national headquarters of the society a Nation-wide appeal for public assistance to the stricken town in the care of the indigent sick and the fight to overcome the terrible epidemic. The response to this appeal was generally generous; the people of Franklin alone subscribed approximately \$1,500. The State took over the work of sanitary measures and the cost of the work that was required in that direction.

This disease is now comparatively well controlled. In the early days contaminated water supplies were the greatest cause of the infection, but the thorough and persistent safeguarding of water supplies for domestic use has greatly lessened the incidence of the disease and

today water is not the most likely cause to be suspected. In 1906 the average number of cases in the State was approximately twenty-five thousand per year, while now it is usually less than one thousand cases per year. The cause of infection now is usually a carrier through milk and food, and all known carriers are recorded and prohibited from handling food in any manner for consumption by the public.

Uniontown had an epidemic of the disease a few years ago and one of the State epidemiologists, sent there to conduct an investigation, traced the source of infection to a woman who had assisted in the preparation of the food served at a church supper.

The influenza and pneumonia epidemic of 1918 struck heavily in northwestern Pennsylvania. In many of the cities, emergency hospitals were provided and it was with great difficulty that all patients were properly cared for. Many of the physicians were victims and nurses and physicians who were able to practice their professions were busy day and night.

In Franklin, the commodious Young Men's Christian Association Building was converted into a temporary emergency hospital and was taxed to capacity. Pharmacists were on duty practically twenty-four hours a day. A brother of the author, Martin W. Riesenman was a leading pharmacist at the time; one clerk after another was stricken, and finally the proprietor himself, and the author, a former pharmacist, was called into service.

The situation throughout the entire region was much the same. The town of St. Marys was especially afflicted. Up to October sixteenth, St. Marys was free from the disease, but in that day, sixteen cases were reported. In five days, between four hundred and five hundred cases were reported in the borough and township. W. G. Bauer, who at that time was chief burgess, acted as soon as the first cases were reported by the physicians; he realized that the local Board of Health needed assistance and thus organized an Emergency Health Committee composed of leading citizens. The Elks offered their fine home as an emergency hospital, and on October twenty-first, the hospital was opened to receive patients.

The Board of Health at that time consisting of Dr. A. F. Davis, F. S. Hammond, William Cheadle, W. F. Marshall and P. F. Sweney, and the Emergency Committee, together handled the situation in a manner which won them the highest acclaim on the part of the citizens of the town. The physicians of St. Marys—they were Dr. C. G. Wilson, Dr. Alfred A. Mullhaupt and his wife, Dr. Helena Mullhaupt, Dr. A. F. Davis, Dr. J. C. Cochran and Dr. A. C. Luhr—placed themselves at the disposal of the Emergency Committee.

The local physicians being unable to cope with the ever-increasing number of cases coming to the hospital hourly, it became necessary to appeal for medical help, and the following from out of the town responded: Dr. Roy H. Blair, of the State Department of Health, Drs. Heimbach, Larson and Denny of Kane, Drs. Robinson, African and Brown of Warren, Dr. Patton of Bradford and (Dr.) Rev. Eben J. Russ, although retired from practice for quite some time, again assumed his title and helped where he could.

On the twentieth the first death was reported, Edward Kreckel, and his four-month-old daughter died shortly afterward. Two days later, the deaths had mounted to thirteen, and were constantly rising. Several of the local boys in the various war camps had died, and their bodies were being shipped home. Thirty-two deaths occurred in the Emergency Hospital. The physicians were working day and night, and the Emergency Committee was on the job twenty-four hours a day. Trucks pressed into service as ambulances were constantly on the streets. From everywhere came the call for help, and those two weeks, and more, were days and nights to try the nerves of the strongest. When the epidemic finally spent itself it was found that in the short time it had claimed the lives of close to a hundred and fifty persons.

In recent years, except for the customary epidemics of diseases usually associated with children, the region has been quite free from all disease in epidemic proportions, while the people generally have become public health minded and generally take advantage of the means provided by science to prevent, cure and control disease. With a very capable and efficient State Department of Health and physicians of outstanding ability and adhering to the high ideals of their noble profession, the region is well protected in the matter of health. In all of the cities there are hospitals, two or more in some of them, all of a high standard and capably administered.

CHAPTER XVIII

Historical Outline of the Counties of Northwestern Pennsylvania

"In days of old, when knights were bold, and barons held their sway," an English county was the domain of a Count or Earl. Where this more or less important individual had his home or castle was often called a county-seat. The term shire was also used instead of county and the county seat became a shiretown in the common vernacular. In general a county division of a British country or region was made for purposes of administration. The English people and influence were so dominant in the settlement of America that it was almost inevitable that the county system of dividing colonies and states was adopted, although there were no earls and counts. As the country developed it became necessary for civil divisions to be established that the citizens might have a more convenient and individual autonomy, or provisions made for smaller areas of political, administrative and judicial activities. If John Jones wanted to cast a vote, have a public road built, seek a judicial opinion on whether a neighbor had cheated him, he did not enjoy traveling some badly blazed trail for a hundred miles in order to get these things done. The more populous the region the more it sought local government and application of justice.

After the Revolutionary War, and the founding of a republic, most states adopted the county as a civil entity, except Louisiana, which still prefers the "parish." In most of the United States the counties to a great extent preserve an autonomy, each being provided with its own sheriff, coroner, judiciary and inferior legislative body (for purposes of legal enactments), generally styled county commissioners. Each county is charged with the support of its own paupers, with the maintenance of good roads, etc., and for local elections usually constitutes an independent constituency. In most instances the county is divided into townships, towns or parishes,

into boroughs and cities, which in turn to a lesser degree preserve an independence.

Many think that the setting up of counties has gone too far and that in too many states the counties are too numerous and over costly, whereby the expense of government is raised to heights for which there are no compensating advantages. There are sixty-seven counties in Pennsylvania, of which Philadelphia is largest and Forest the smallest in population. Philadelphia County is the smallest in area, 128 square miles; Forest ranks among the medium large counties, 420 square miles. In 1940 Forest had a population of 5,791; Philadelphia County then had nearly two million people. Incidentally, Forest had gained about six hundred residents in a decade; Philadelphia County had lost nearly six times as many citizens as the whole population of Forest. The latter named required twenty-three individuals to conduct its official business; Philadelphia County needed only nineteen. In the east these officials were paid more, but only a comparatively few thousand dollars.

If, however, the reader is inclined to be critical of the too numerous and small counties of Pennsylvania, let him turn his attention to the states of the Union, which though less populous than the city of Philadelphia, have as many or more counties than the whole of Pennsylvania, with a population of more than nine million six hundred thousand. Consider Georgia, with 156 counties and population far less than one-third the population of Pennsylvania. Behold the State of Texas, whose two hundred and fifty-four counties include a number, almost as great as Pennsylvania's county total, each with fewer people living in it than Forest County of the Keystone State. Whoever desires to make a case against too numerous civil divisions of states and the consequent high costs of local government, may better choose some other State than Pennsylvania.

The development of counties in America was tied up with the original "Patents, Crown Grants, Charters" and the various methods of establishing the boundaries of colonies in the New World. So little was known of America in the sixteenth century, especially as to the vast depth of the country to the west, that there was overlapping of Crown grants on the Atlantic Coast, and sometimes a patent or charter was given with no, or very indefinite, limits to the west. When the colonies became states there were remnants still left of territorial boundaries that not only caused confusion but led to long drawn out litigation. To illustrate: the fixing of the boundaries between the three southwestern counties of New York and three

northwestern counties of Pennsylvania, caused disputes and raised questions of land titles that have been continued to our day and generation. It must be conceded that the Indians, more particularly the Iroquois Nation, were the original owners of this area. Unlike most other aborigines in America, they had definite ideas of land tenure. To some adventurer who had gone ashore on the coast of the New World at some place where he had never been before was given discovery rights by some ruler in a land three thousand miles away, the "discoverer's right" to an area the potentate knew nothing about and cared less, except that the newly (?) discovered Eldorado might add to kingly prestige and wealth. Then there were favorites at the court or commercial companies that secured grants, oftentimes on the very territory donated to the discoverer, or to some other individual or group. Kings had the habit of changing their minds and favorites, and were thoroughly ignorant about geography. Then, too, one ruler succeeded another and they would hand out the same vast territory to whom they pleased, or who pleased them. King James I at first gave territory limited to the west by one hundred miles. A few years later, in 1620, he presented patents whose western limit was the "South Sea" (Pacific Ocean). To complicate matters further, the French extended their claims in a southerly direction and included country in what became western New York and Pennsylvania. This was ceded to England in 1763, but meant little, since the British had already disposed of large parts of French claimed land. The full story is told elsewhere in this work.

To begin at the beginning, the first three counties of Pennsylvania were established by William Penn along the Delaware River and named Buckingham, Philadelphia, and Chester. Philadelphia separated the two others and its limits were somewhat determined by this fact. Its southern boundary extended to its limit, reached the eastern part of New York, thereby precluding its ever being included in the counties of northwestern Pennsylvania. Therefore, it would seem that these distant counties must have been within the confines of the original Chester County, which extended west to the "extreme limits of the Province."

Historians are not in agreement on this subject. They likewise disagree as to which of the three original counties was established first. Philadelphian authorities and others insist that Philadelphia County was erected first, on March 10, 1682, and that later in that same year came Chester and Bucks (Buckingham) simultaneously. Chester County is frequently named as the oldest of the three, prob-

ably because of its earlier settlement by the Swedes at Upland, 1643. The lines of the three counties were confirmed by the Provincial Council on February 1, 1685.

The first limitation of the area of Chester County was imposed on May 10, 1729, when Lancaster was set up from Chester as the fourth Pennsylvania county. On January 27, 1750, the big Cumberland County was formed, whose western extent was limited to "what land can be purchased from the Indians." On March 12 or 21, 1772, a provincial act established Northumberland County from parts of Lancaster, Cumberland, Berks, Bedford, and Northampton counties, its boundaries north and west extending to the limits of the Province. Northumberland gave birth to so many other civil divisions that she came to be called "The Mother of Counties."

To those who prefer a different tracing of the early genealogy of most of the northwestern counties of Pennsylvania, let us present the following sequence: On March 9, 1771, Bedford County was taken from Cumberland, and when the county of Westmoreland was erected from Bedford, on February 6, 1773, both included the region to the west. It is claimed by some that this part of Pennsylvania was not affected by the above act. On the other hand it is asserted that through the proceedings consequent to the purchase of sections of northwestern Pennsylvania from the Indians, all this section became a part of Westmoreland County. On a Pennsylvania map of January 1, 1780, one can find a space covering almost a third of the present State in its northwestern part. On it is marked "Not included in any county until April 8, 1785, when this was annexed to Northumberland County."

Westmoreland County was the last county to be founded under the "Proprietary Government" for the Province put off further divisions of its territory until a war with the Mother Country had been won. Our Nation had become a republic, when on September 24, 1788, Allegheny County was formed from Westmoreland County. Its jurisdiction extended from below the jointure of the Monongahela and the Allegheny rivers, bordered by the Allegheny River on the east, New York and Lake Erie on the north, and Ohio on the west. The year 1800 witnessed the erection of more counties in the Commonwealth than any other, and the last remaining corner of the State was organized. In January, Adams was set up; in February, Centre; and on March 12, 1800, the organization of no fewer than eight counties was authorized by the General Assembly: Armstrong, Beaver, Butler, Crawford, Erie, Mercer, Venango, and Warren, the

territory for them being taken mainly from Allegheny County. As we shall see, few if any of these civil divisions completed organization in that year. Crawford County, with Meadville as the county seat took the lead, and several years was the seat of justice for contiguous counties, including Erie. In May, 1839, a District Court was created to handle the accumulation of cases in the counties of Erie, Crawford, Mercer, and Venango.

By an Act of March 26, 1804, McKean, Jefferson, Clearfield, Potter, and Tioga counties were erected. Clarion County was founded in 1839, Elk County in 1843, Forest County in 1848, and Cameron County in 1860. Among the above are the twelve counties grouped together for the purpose of this work as northwestern Pennsylvania—Cameron, Clarion, Clearfield, Crawford, Elk, Erie, Forest, Jefferson, McKean, Mercer, Venango, Warren. As one reads the names, one is struck with their simplicity. Natural features of the country seem to have been deemed by the hardy pioneers as appropriate titles. Clarion, Clearfield, Elk, Venango, all are names of creeks or rivers; Erie is more likely to have been derived from the great lake than from an Indian tribe; Forest is self-explanatory; and these make up half of the twelve. Patriotism and politics apparently were the second strongest influences; Jefferson was a President of the United States whose political ideas ran strong in the minds of voters, when the county was so named. Cameron was a former United States Senator; and McKean, a former Governor of the State. Crawford, Mercer and Warren were Revolutionary War officers and heroes. "What's in a name?" when white men and women enter a forest domain to carve from its depths a home and livelihood? Engaged in an economic struggle against heavy odds, but democratic in outlook, the pioneers sought self-government, local in character and inexpensive. What they called the territory set aside to accomplish these ends, was often a compromise between varied opinions, and probably cannot be taken to have much significance. To carry out further their ideas, townships were organized so that each small unit of the county could preserve a certain amount of independence and be free, to a limited extent, to carry on local affairs, locally.

The older county histories, of which many were published prior to and through the oil boom in northwestern Pennsylvania affairs, go into much detail concerning the times and ways in which each county was authorized and eventually organized. As has already been indicated, Crawford County and its organization for various purposes

was consummated within a short time. Erie County, legally erected March 12, 1800, was not organized for all judicial and governmental purposes until 1803. In the meanwhile Erie, Mercer, Venango, and Warren counties were practically still a single county functioning under the name Crawford, with a single set of county officers and one member of the Legislature. Meadville was the "seat of justice." Mercer County became effective judicially not until February, 1804. The Pennsylvania Legislature, by an Act passed April 1, 1805, conferred upon Venango County "all and singular the jurisdictions, powers, and privileges" enjoyed by other counties from and after the first day of September following. The first officials took the oath of office on July 15, 1805. Warren was the last of the original five counties of northwestern Pennsylvania to complete organization (1819), although authorized in 1800. For the first five years the inhabitants of Warren County plodded the long way to Meadville to transact public and legal business. Then for the following fourteen years they made the same toilsome journey to Franklin, sixty-five miles from the hamlet of Warren. The Legislative Act stated that after October 1, 1819, Warren could throw off its ties with Venango County. If, or when, there was a first election of officials is unknown, but on October sixteenth, three county commissioners held a meeting. On November eighth, Charles O'Bail, son of Cornplanter, presented a claim on the county for two full-grown wolf scalps, and thereby threw consternation into the treasury of Warren County.

Why was there such a delay in the early days between the erecting of counties and their establishment of a working officialdom? There are a dozen answers to this question. Politics entered into the authorization of counties. Some representative in the General Assembly desirous of making a good showing for his district sponsored divisions of large and already established counties into more parts and more political offices. No doubt these representatives were motivated by a desire to promote the progress of the regions affected, and endeavored to make a constructive contribution to the better, broader and more economical handling of local affairs. Again, some pioneers of the "wilderness" had to traverse by devious and almost unmarked routes as much as two hundred and more miles to Pittsburgh to comply with the law, and as far back again to his log cabin. All this was done in the cold season for he needed all of the spring, summer and fall for his agricultural or other operations. There was one serious mistake made in the authorization of county divisions—

it was done too early in the settlement of northwestern Pennsylvania. Too few people were located in the country, and the support of even simple governmental and judicial officials was impossibly heavy. When the above five counties were set up as separate parts of the State, there were only (Census of 1800) 2,346 people in Crawford County; 3,228 in Mercer County; 1,468 in Erie County; 1,130 in Venango County; and only 233 in Warren County. So late as 1810 there were only 827 residents, men, women and children, in Warren County. There simply were not enough taxable citizens to pay the costs of a few county commissioners, without regard to the expense of a courthouse or the rent of a room in a private building or tavern. And how much could they be expected to raise for a jail, a poorhouse, the county farm, for roads, post offices and post routes, etc.? To the credit of our forefathers let it be recorded that they fulfilled excellently their duties as citizens of a county, and initiated and preserved their institutions through good years and bad. Charles A. Babcock, in writing of the establishment of Venango County, said:

“Thus simply was a new civil organization erected in the heart of a wilderness; but it was really planted in the heart of a new ideal. The wilds about it did not matter, the spirit sufficed. The officials chosen were not subservient to blind authority; they were elected by equals to be responsible for the continuance of equality. They were greater than the lords and knights of any king, for they were the embodiment of the civil whole, in intention, intelligence, power.”

Into the minutiae of county histories we need not go at length. They always have had their troubles, whether the question of boundaries, often surveyed over country where not even the moccasin of an Indian had trod; or the attempts at separation, consolidation, or the erection of new civil divisions. Originally and down to the present, these counties have been large. One-third of the counties of northwestern Pennsylvania are just about a thousand or more miles in area, and three of these approach Rhode Island in area and possess more land than this New England State. Even the smallest western county is about one-third the size of Rhode Island. These are comparisons of the present and not of the past. Even the disappearing automobile in this time of global war cannot reduce one thousand two hundred square miles to insignificant distance. It may with all modesty be said that the civil divisions of northwestern Pennsylvania have shown very good sense in keeping counties much as they have been

as regards size, economy of expenditures, in good government, and the care of local needs. Only Erie County can show great wealth. Several others have experienced dire changes in industries and incomes. In the main the population is static; but withal this corner of the Commonwealth is matured Americanism at its best, a region where folk manage their affairs with sound sense, individuality and efficiency.

We follow in this chapter with a sort of cyclopedic outline of the erection of counties, the establishment of townships and the incorporation of cities and boroughs. Figures included are based on the Census of 1940. When statistics are not of 1940, the different year will be inserted in the text.

CAMERON COUNTY

Area, 401 square miles. Population, 6,852.

Total taxable valuation for county purposes, \$3,407,406.

Total local taxes collected, \$121,147 (1939).

Agriculture—Number of farms, 165; acres under cultivation, 3,336; value of lands and buildings, \$373,382; value of crops, \$74,860.

Manufacturing—Number of establishments, 7; capitalization, \$2,390,200; value of products, \$6,264,400; total number employed, 2,269; total compensation, \$2,495,200.

Cameron County was erected by an Act of March 29, 1860, from parts of Clinton, Elk, McKean and Potter counties. It was named in honor of United States Senator Simeon Cameron, a leading Pennsylvania politician, then prominent in public affairs. Mountainous, for the most part, and formerly very heavily forested, lumbering was its first chief industry, combined with tanneries and agriculture. Bituminous coal has long been mined, mainly for local use, and there is some natural gas. Emporium, the county seat, is by far the outstanding seat of business and industry; one of its factories making radios and parts, employing more than two thousand in 1940. The manufacture of leather goods and explosives ranks next in importance.

BOROUGHES

Emporium, the county seat, formerly called Shippen, after Edward Shippen, who settled here in 1810, has a population of 3,775, more than half of the total number of citizens in Cameron County. It was laid out as a village in 1853-54 and selected as the county seat in 1860-61; incorporated as a borough on October 13, 1864. Tradition has it that an agent of the Holland Land Company

gave to the site, as early as 1785, the name Emporium. He probably had a smattering of Latin, and perhaps Greek, and chose the dead language title meaning "a center of trade." The borough is today a center of industry as well as of trade, banking, education, newspapers, and almost every other county activity.

Driftwood, formerly known as "The Second Fork," is the oldest of the larger settlements in the county, dating from 1804. Incorporated as a borough January 17, 1872, it has since been known as Driftwood, from the creek of the same title. Population, 293.

TOWNSHIPS

Gibson—Erected while located in Clearfield County. Population, 364.

Grove—Established while a part of Lycoming County and named in honor of Peter Grove, pioneer Indian fighter who conquered the aborigines in endeavoring to hold his land here. The principal village, Sinnemahoning, was laid out in 1805. Population, 461.

Lumber—Set up while a part of Clinton County and named for its former chief natural resource and industry. Villages, Sterling, Cameron, and Canoe Run. Population of township, 342.

Portage—Taken from Potter County in 1860. Named after the portage branch of the Sinnemahoning River. Villages, Sizerville and Prestonville. Population of township, 126.

Shippen—Area, 200,000 acres. Population, 1,491. (See Emporium.)

COUNTY OFFICIALS

Sheriff, Fred Williams; prothonotary, register, recorder and clerk of Court of Quarter Sessions and Orphans' Court, Fred A. Moore; district attorney, Edwin W. Tompkins; solicitor, John D. Gresimer; jury commissioner, T. S. Fulton; jury commissioner, Lamont N. Kreider; associate judge, Bernard G. Erskine; associate judge, C. W. Rishell; coroner, Dr. W. H. Bush; sealer, J. B. Tilburg.

CLARION COUNTY

Area, 599 square miles. Population, 38,410.

Total taxable valuation for county purposes, \$17,559,426.

Total local taxes collected, \$493,181 (1939).

Agriculture—Number of farms, 2,199; acres under cultivation, 105,269; value of lands and buildings, \$8,348,959; value of crops, \$1,635,600.

Manufacturing—Number of establishments, 46; capitalization, \$3,767,700; value of products, \$6,415,900; total number employed, 1,219; total compensation, \$1,658,900.

Clarion County, made up of parts of Armstrong and Venango counties, was authorized on March 11, 1839. It derives its name from Clarion River, which intersects it, as does the shire town and largest borough. Located on the "Allegheny Plateau" and therefore rocky and hilly, or even mountainous, it has changed greatly in the interests of its citizens. Fifteen or twenty years ago more than half of its area was in farms with a large part of the land in cultivation. Today the proportion of its 599 square miles under actual cultivation has been reduced more than fifty per cent. Clarion County has always been rich in natural resources; timber—of which the Cook Forest Park, containing the biggest area of virgin white pine east of the Mississippi River, is evidence. There, likewise, are deposits of bituminous coal, oil and gas fields, and extensive quarries and deposits of valuable sands and clays, that make up the basis of local industries. Historically, the first white man to traverse the Clarion County region was the Moravian missionary, Christian Frederick Post, who in 1758 bore a message from the Proprietary Council to the Indians on the Allegheny and Ohio rivers. Bishop David Zeisberger, another Moravian missionary, was here in 1767; Colonel Daniel Brodhead's expedition against the Six Nations, in 1779. A land office was opened on May 1, 1785, and the first group of permanent settlers arrived in 1801.

BOROUGHS

The county seat, *Clarion*, was laid out as a town in 1839 by John Sloan, and was incorporated April 6, 1841. Its selection as the shire town was made by the new county commissioners, and certainly their choice was good. Its industries are varied, it is the seat of a State Teachers College, dating from March 18, 1867, or officially under its present title, State Normal School on February 15, 1887. Population, 3,798.

Callensburg—Incorporated from Licking Township, 1851, and named from Hugh Callen, Sr., who laid out the town in 1826. Population, 289.

Curlsville—Incorporated from Monroe Township, and named for William Curll, an early settler. Population, 169.

East Brady—Incorporated from Brady Township, May 29, 1869. Situated just east of Brady's Bend, and named for Captain

Samuel Brady, the noted Indian fighter and Revolutionary officer. Brady's Bend was the scene of one of his many famous exploits. Laid out in 1866. Population, 1,427.

Edenburg (Knox P. O.)—Incorporated from Knox Township, April 27, 1876. Settled in 1840. First named Eden, by J. G. Mendenhall, the founder. Oil wells were struck here in 1873. Seat of White Memorial School. Population, 1,098.

Foxburg—Incorporated from Richland Township in 1930. Founded during the oil boom in 1870. Named for the Fox heirs who owned the land. Population, 441.

Hawthorn—Incorporated from Ed Bank Township, May 10, 1917. Population, 628.

New Bethlehem—Formerly Gumtown, later Bethlehem, but the prefix "New" was added to distinguish it from Bethlehem, Northampton County. Settled in 1758, and laid out in 1840. Population, 1,622.

Rimersburg—Incorporated from Toby Township, in 1853. Settled by John Rimer in 1829 and named for him; laid out in 1829. Population, 1,319.

St. Petersburg—Incorporated from Richland Township, February 23, 1872. Daniel Snyder settled here in 1820. First named Petersburg in honor of Judge Peters, former owner of the site. Name changed when incorporated. Town several times visited by disastrous conflagrations. Population, 510.

Shippenville—Incorporated from Elk Township, December 23, 1889. Laid out in 1826 by Richard Shippen, for whom it was named. Population, 517.

Sligo—Incorporated from Piney Township, September 20, 1878. Laid out in 1871, and named for the Sligo furnace located there in 1845. First settled by Craigs. Population, 948.

Strattanville—Incorporated from Clarion Township in 1850. Laid out in 1828 by John Strattan, who owned the site. Population, 604.

TOWNSHIPS

Ashland—Erected from Elk and Richland townships in 1856. Settled in 1804 by Thomas W. Mays. Villages, Fern, Kossuth, Valley, and Mong. Population of township, 819.

Beaver—Erected from Richland Township when part of Venango County. First settled in 1801 by Henry and Harold Best. Iron furnaces were early enterprises. Borough Edenburg, and villages of Blairs Corners, Wentling's Corners, Church, Lutz, Monroe, Jefferson City, Canoe Ripple, and Ritts. Population of township, 1,448.

Brady—Named for Captain Samuel Brady, soldier and Indian fighter, and pioneer settler; established from Madison Township in 1866. Borough of East Brady, and village of Phillipston. Population, 213.

Clarion—An original township, erected from Red Bank Township, when part of Armstrong County. Settled in 1801. Boroughs of Clarion, county seat, and Strattanville, and villages of Frampton, Day, Mechanicsville, Mill Creek, Waterson, Showers, Henderson, and Hampton. Part of Clarion Township was annexed to Clarion Borough in 1939. Population of township, 1,662.

Elk—Organized in March, 1806. Named after Elk (now Deer) Creek, and settled in 1808 by the Growe family. Borough of Shippenville and villages of Elk City, Haynil, Millerstown, Cheerful, and Black Station. Population of township, 1,094.

Farmington—Erected in 1806 and first called Deer, when part of Venango County. Villages of Scotch Hill, Tylersburgh, Leeper, Wilderness, North Pine Grove, Vowinkel, Crown, and Haskell. Population of township, 1,660.

Highland—Established from Paint and Farmington townships in 1848. The pioneer settler, named Purcell, was killed by a falling tree. Underlaid with iron ore. Villages of Helen Furnace and Miola. Population of township, 420.

Knox—Taken from Paint, Highland and Washington townships, May 7, 1853, and named for Judge John C. Knox. Settled in 1820 by John B. Vogelbacher, a famous hunter. Villages are Lucinda, Vogelbacher, Snyderburg, and Huefner. Population of township, 1,189.

Licking—The township is divided by the Clarion River. Settled in 1804 by Thomas Morgan. Woolen mills, iron furnaces and oil wells were early industries. Borough of Callensburg and villages of Turnip Hole and Easton Village. Population of township, 629.

Limestone—Thomas Meredith, a veteran of the Revolutionary War, settler here prior to 1800. Established from Red Bank Township in 1842. An almost inexhaustible supply of limestone underlies

the township, also rich deposits of iron ore and coal. Villages of Limestone, Kingsville, Crates, Grogtown, Holden, Rocler, Sloan Gap. Population of township, 1,329.

Madison—An original township, erected when part of Armstrong County out of Toby Township, and settled by Thomas Conner in 1800. Rich deposits of coal and limestone, oil and gas. Borough of Rimersburg and villages of Watterson's Ferry, Lawsonham, New Athens, Catfish, Sarah Furnace, Red Bank, Furnace, Mortimer, and Shannon. Population of township, 2,148.

Millcreek—Established from Red Bank Township. Lumber was first product, and there are rich underlayings of bituminous coal. Villages of Fisher and Gravel Lick. Population of township, 364.

Monroe—Organized in 1832 out of Red Bank Township. Lewis Doverspike was the pioneer settler in 1800. Borough of Curllsburg and villages of Reidsburg, Churchville, Williamsburg, Keeversburg, and Burma Five Points. Population of township, 1,105.

Paint—Settled in 1820. An original township, erected when part of Venango County. Village of Arthurs. Population of township, 457.

Perry—Originally of Armstrong County. Villages of Perryville, Pollock, West Freedom, Dutch Hill, and West Monterey. Population of township, 1,602.

Piney—John McLaughlin was the pioneer settler in 1798. Township has underlayings of iron ore, coal, fire clay and limestone. Borough of Sligo and villages of Madison Furnace, Shamburg, Piney, Bellville, and Logtown. The county poor farm is in the township. Two large tunnels at Madison Furnace are said to be the third longest in the world. Population of township, 819.

Porter—Struck off Redbank Township in 1839, and named in honor of David R. Porter, then Governor of Pennsylvania. Settled in 1800 by veterans of the Revolution, or those to whom the soldiers sold their lands. Borough of New Bethlehem and villages of Rockville, Leatherwood, Brinkerton, Piolett, Frostburg, Rock Run, St. Charles, Climax, Squirrel Hill, and Smithland. Population of township, 1,549.

Redbank—Named after Redbank Creek and organized September 18, 1806. Henry Nolf was pioneer settler in 1800. Borough of Hawthorn and villages of Shannondale, Truittsburg, Mayport, Oak Ridge, Fairmont City. Population of township, 1,622.

Richland—An original township, erected when part of Venango County. Settled in 1806 by David Ashbaugh. For many years oil was a chief source of wealth. Borough of Foxburg and St. Petersburg and villages of Alum Rock, Turkey City, and Richmond. Population of township, 725.

Salem—Erected in 1856 from parts of Richmond and Beaver townships. Coal and oil are present. Villages of Salem and Laramine. Population of township, 823.

Toby—One of the first townships to be organized in Clarion County. Settled in 1797. Borough of Rimersburg and villages of Huey, Toby, Fredell, Bela, Upper Hillville, and Cherry Run. Population of township, 1,775.

Washington—Established in 1843 from Piney, Elk, and Farmington townships. Settled in 1815. Villages of Fryburg, Lickingville, Lineville, Venus, Newmanville, Johnlowen, Strobleton, and Marble. Population of township, 1,514.

COUNTY OFFICIALS

Sheriff, W. O. Mong; register, recorder and clerk of Orphans' Court, William H. Thompson; prothonotary and clerk of Court of Quarter Sessions, Arthur Gillinger; district attorney, W. P. Geary; solicitor, A. A. Geary; jury commissioner, A. W. Neely; jury commissioner, W. K. Baumgardner; coroner, H. M. Wellman, M. D.; sealer of weights and measures, James B. Carlos.

CLEARFIELD COUNTY

Area, 1,144 square miles. Population, 92,094.

Total taxable valuation for county purposes, \$26,366,205.

Total local taxes collected, \$1,367,928 (1939).

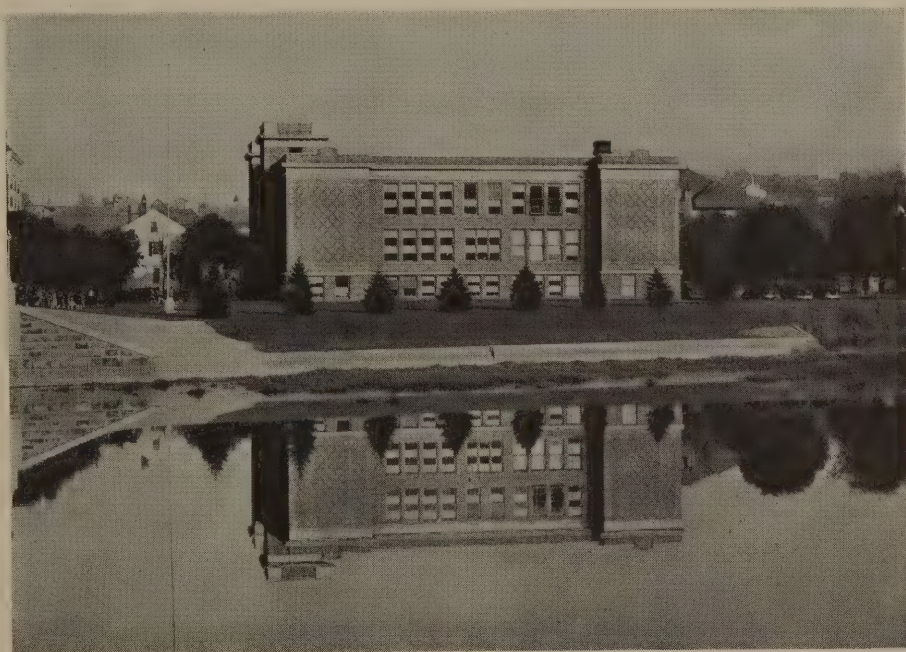
Agriculture—Number of farms, 3,530; acres under cultivation, 103,763; value of lands and buildings, \$7,861,012; value of crops, \$1,216,400.

Manufacturing—Number of establishments, 89; capitalization, \$11,610,500; value of products, \$15,969,600; total number employed, 4,943; total compensation, \$5,592,500.

Clearfield, one of the largest counties in Pennsylvania, was authorized by a Legislative Act of March 26, 1804. It was duly organized some years later and included parts of the counties of Huntingdon and Lycoming. Parts of its area went into the forming of Elk County in 1843, and a very small section was annexed in 1868 by Jefferson and Elk counties. Located mainly on the western slope of the Alle-

gheny Mountains, it is a hilly country, with numerous small and large streams which once floated timber to market and later helped add to the erosion started by the destruction of the primitive forests. Coal is one of the chief present natural resources, which also include fire and other clays, siliceous sands, building stone. Hence the principal industries are mine and quarry products, clay, glass and stone products, leather and rubber goods, in the order named.

The county was named after Clearfield Creek, the "Clearfield" being derived from fields cleared of their brush by feeding buffaloes; at least



(Photo Courtesy of "Clearfield Progress")

Clearfield High School, Reflected in Susquehanna River (West Branch)

that was the theory propounded in 1772 by the Rev. John Ettwein, noted Moravian missionary to the Indians. The earliest settlers of several races arrived prior to the Revolution. Godcharles, in his "History of Pennsylvania," writes:

"The county commissioners appointed to locate the county seat, received several propositions, and in 1805, selected a tract of land belonging to Abraham Witmer on the site of Chingleclamouche's Old Town Town, sometimes spelled Chinklamoose, the name of a famous chief who dwelt there, a word signifying 'at the quiet hill.' The latter part of this name

also survives in the name of Moose Creek. Chingleclamouche was the most important Indian village on the upper West Branch of the Susquehanna River, from 1700; it was destroyed by Provincial troops, marching from Fort Augusta in November, 1756. Important Indian trails traversed the county, crossing the head waters of Clearfield Creek, Chest Creek, near 'Hart's Sleeping Place,' and the West Branch at Canoe Place; another ran from Bald Eagle Creek west across the Moshannon and Clearfield creeks to Chingleclamouche; this was frequently called the 'Traders' Path.' James Woodside was the first permanent settler of Clearfield County (1784), although before the American Revolution there were temporary residents of Irish, Scotch, French and German blood. 'In 1828, one Peter Karthaus arrived in Harrisburg with six "arks," laden with bituminous coal from his mines in Clearfield County, and it was exhibited in front of the Capitol, but the industry was not developed to any great magnitude until about 1870. Karthaus also started the iron industry, and it is said that he was the first in Pennsylvania to smelt iron by means of bituminous coal.'"

CITY

DuBois, the largest municipality in the county, is eminently well situated in a part of what was known as The Great Beaver Meadow. It was settled by John Casper Stoeber in 1812; laid out in lots by John Rumberger in 1872; incorporated as a borough in January, 1881, and received a city charter December 23, 1914. It received its greatest impetus when, in 1873, John DuBois, lumber magnate of the region, built immense lumber mills on his Sandy Creek tract and erected houses for employees. The city is the seat of a variety of industries at the present time. Population, 12,080.

BOROUGHES

Clearfield—The county seat, and largest borough, was built on the site of the ancient Indian village, Chingleclamouche. Chosen as the shire town in 1804, it was platted by Abraham Witmer during the following year, and on April 21, 1840, was incorporated as a borough. Population, 9,372.

Brisbin—Incorporated in 1883 from Woodward Township, and named for George M. Brisbin, pioneer of the county and first settler on site of the borough. Population, 501.

Burnside—Located in a fertile farm and good coal section, was incorporated from Burnside Township in 1874. Population, 501.

Chester Hill—Situated in Decatur Township, was incorporated in 1883. It is a residential suburb of Philipsburg, Centre County. Population, 883.

Coalport—Originally laid out by Haines and Spangle from Beccaria Township in 1883, was first called Reilley. Coal is the principal source of prosperity. Population, 1,121.

Curwensville—Incorporated from Pike Township, February 3, 1832. Named after John Curwen, of Montgomery County, who, in 1798, obtained title to the land on which the town was laid out in 1812. Chief products, fire brick, tannery products, milk products, blouses, clay, coal, stone and timber. It is beautifully located as a trading center. Population, 3,422.

Falls Creek—Established from Sandy Township, August 18, 1900. Population, 1,255.

Glen Hope—One of the earliest settled places, was not made a borough until 1878. It is a trading town for the surrounding agricultural district. Population, 185.

Grampian—(Pennville) incorporated in 1885 in Penn Township. Settled in 1805 by Quakers, who called the place Pennville; later, in 1895, named Grampian by Dr. Samuel Coleman, the pioneer physician in the county, because of its resemblance to Grampian Hills, Scotland, his native place. Population, 632.

Houtzdale—Named after Dr. Daniel Houtz, who owned a vast amount of land in the county; incorporated March 20, 1872, from Woodward Township. It is the largest of a line of towns extending along the railroad for three miles. Population, 1,430.

Irvona—Incorporated from Beccaria Township, in 1890, and named for Colonel E. A. Irvin, of Curwensville, its founder. The principal industry is the manufacture of pottery, terra cotta and fire clay products. Population, 1,049.

Lumber City—Established from Penn Township, in 1857, was the third borough to be incorporated (1838) in Clearfield County. Settled by Henry Hile, in 1835; owes its existence to extensive lumber mills. Population, 300.

Mahaffey—Incorporated from Bell Township, 1889. Settled in 1841 and named in honor of its founder, James Mahaffey. Population, 609.

Newburg—Formerly Hurd, established from Chest Township, 1885. Coal mines. Population, 183.

New Washington—Incorporated, April 13, 1859, from Burnside and Chest townships, is a survival of the lumbering days. Has now become something of a mountain resort. Population, 80.

Osceola—Laid out from Decatur Township in 1857 and incorporated in 1864. A mill was operated here by Daniel Hoffman in 1844. Developed as a manufacturing center with coal and lumber



(Photo Courtesy of "Clearfield Progress")

St. Francis Catholic High School, Clearfield

products. Almost completely destroyed by fire May 20, 1875. Population, 2,076.

Ramey—Incorporated from Geulich Township, in 1878. Population, 753.

Troutville—Begun as a town in 1854, it was incorporated from Brady Township in 1890. The town is dependent on mining and agriculture. Population, 238.

Wallaceton—Incorporated from Boggs Township, in March, 1873. Located on an elevated plateau, it was named after Robert Wallace. Population, 386.

Westover—Taken over from Chest Township in 1895. Tannery, sole leather chief product. Population, 669.

TOWNSHIPS

Beccaria—Named in honor of Marquis De Beccaria, distinguished philosopher, one of the earliest settled in the county, erected from Chingleclamouche Township, did not become a township until 1830. The early industry was lumbering, soon followed by the discovery of coal. Borough of Glen Hope and villages of Utahville, formerly Mount Pleasant, Ventland, Smoke Run, Beccaria, Rosebud, Frankhurst, Heverly, and Chesterfield. Population of township, 3,195.

Bell—Erected from Chest and Hope townships, February 4, 1835. Named for Arthur Bell, an early settler. Borough Mahafey and villages of McGee's Mills, Newtonburg, Rowles, Ostend, Troutdale, and Curry Run. Population of township, 1,197.

Bigler—Established from Woodward, Knox, Geulich and Beccaria townships, 1883, and named in honor of Hon. William Bigler, late Governor of Pennsylvania. Villages of Madera, Belsena, Amesville. Population of township, 2,716.

Bloom—Named after William Bloom, pioneer settler. Erected from Penn, Pike, Brady, and Union townships, January 14, 1860. Villages, Packersville, Lawshe, and Bloom Run. Population of township, 583.

Boggs—Erected from Bradford, Jordan, and Decatur townships, in 1838. Borough of Wallacetown, and villages of Blue Balland, Stoneville, West Decatur, Faunce, and Blue Ball Station. Population of township, 1,713.

Bradford—Established in 1807, was of great extent, no fewer than nine townships having been subsequently carved from her. Named for William Bradford, Surveyor-General. Villages of Bigler, Woodland, Williams Grove, Shiloh, and Needful. Population of township, 3,112, a substantial growth in the last decade.

Brady—Named in honor of Captain Samuel Brady, a noted Indian fighter, erected from Chest Township in 1826. First settler was James Woodside, in 1785. A station of the "Underground Railroad" was in the township. Borough of Troutville and villages of Luthersburg, Helvetia, Jefferson, Redfern, and West Liberty. Population of township, 2,299, also shows a substantial increase in population during the last decade.

Burnside—On February 4, 1835, erected from Chest Township. First settler in 1816 was James Gallaher. Named for Judge Thomas Burnside. Borough of Burnside and part of New Washington, and villages of Patchinville, Sylvis, Cherry Tree Station, and Burnside Station. Population of township, 1,399.

Chest—Founded October 16, 1826, from Beccaria and Pike townships, and named for its stream. Family of Daniel Snider were earliest settlers. Boroughs Newburg, Westover, and part of New Washington, and villages of Waukesha, McPherron, Welshdale, and La Jose. Population of township, 798.

Cooper—Erected from Morris Township, January 18, 1884, and named after the Cooper family, one of the oldest in the locality. Villages of Kylertown, Peale, West Clymer, Winburne, Drifting, Lanse, Viaduct, and Grassflat. Population of township, 3,586.

Covington—Established from Lawrence Township in April, 1817. There were many settlers of French and German descent who settled here and there are many residents in Frenchville, also village of Keewaydin. Population of township, 539.

Decatur—Formed in 1828 by a division of Bradford, and named for Commodore Stephen Decatur, hero of War of 1812. Boroughs of Osceola, Chester Hill, and villages of Victor, Gearhartville, Graham, Kephart, Drane, Decatur, Swindleville, Wigton, Donegal, and Beaverton. Population of township, 3,519.

Ferguson—Erected from Pike, Penn, and Jordan townships, February 1, 1839, and named for John Ferguson, an early settler. Villages of Kerrmoor, Gazzam, and Marron. Population of township, 549.

Girard—Named for Stephen Girard, and erected from Covington Township, in 1832. The original settlers were Peter and Mordecai Livergood, in 1818. Villages of Gillingham, Lecontes Mills, Odessa, Coudley, and Surveyor. Population of township, 811.

Goshen—Formed from Lawrence and Girard townships, January 10, 1845. Bomgardner family were pioneer settlers. Villages Lick Run Mills, Shawville, Useful, and Beechville. Population of township, 512.

Graham—Erected from Bradford and Morris townships, August 22, 1856. Named for James B. Graham, who settled here in 1822. Villages Grahamton, Summit Hill, Sington, Butment. Population of township, 755.

Greenwood—After much opposition was erected from Bell, Ferguson and Penn townships, March 19, 1875. Named for Greenwood Bell, early settler. Villages of Bower, Bellville, and Lewisville. Population of township, 570.

Gulich—(Originally Geulich). Named for Father Peter Geulich and erected from Beccaria Township in 1858. Is bordered by three counties, Centre, Blair, and Cambria. Borough of Ramey and villages of Allemansville, Janesville, Ginter, and Smith Mill. Population of township, 2,247.

Huston—Organized from Lawrence Township in 1839. Settled in 1812. Villages of Penfield, Winterbarn, and Tyler. Population of township, 1,519.

Jordan—Erected from Beccaria Township, February 5, 1835. Named for Hugh Jordan, associate judge of county, and veteran of Revolutionary War. Villages of Ansonville, Berwindale, and McCartney. Population of township, 857.

Karthaus—Taken from Covington Township, February 3, 1841, and named in honor of Peter A. Karthaus, the owner of the largest part of this area. Villages of Karthaus, Potterdale, Belford Station, Cateract, and Salt Lick. Population of township, 954.

Knox—Named for the late President Judge Knox. Erected from Jordan, Pike, and Ferguson townships, May 19, 1854. In 1806 settled by James Rea. Villages of New Millport and Erhard. Population of township, 953.

Lawrence—Erected from Chingleclamouche Township, April, 1813, and named in honor of Commodore Perry's flagship in battle of Lake Erie. Borough of Clearfield, county seat, and villages of Porter, Glen Richey, O'Shanter, Hyde, Wright, and Riverview. Population of township, 6,167.

Morris—Established from Bradford Township, February 3, 1836. Named for Robert Morris, financier of the Revolutionary War. Villages of Allport, German Settlement, Munson, Morrisdale, and Hawk Run. Population of township, 3,752.

Penn—Named in honor of William Penn. Erected from Pike Township, February 4, 1835. Borough of Lumber City and villages of Grampian and Hepburnia. Population of township, 1,076, a substantial increase in the past decade.

Pike—Erected from Chingleclamouche Township, in November, 1813, and named after General Zebulon Pike. First settler in 1797 was Paul Clover. Borough of Curwensville and villages of Bloomington, Bridgeport, and Olanta. Population of township, 1,849.

Pine—Established from Lawrence Township in 1873. Named for its pine forests. Smallest township. Population of township, 44.

Sandy—Made on October 28, 1878, from Brady and Huston townships, and named for Sandy Lick Creek. John Casper Stoeber settled here prior to 1812. City of DuBois, borough of Falls Creek, and villages of Eriton, West Liberty, and Sabula. Population of township, 5,293, a substantial increase in the past decade.

Union—Formed in December, 1848, from Brady and Pike townships. First settler, in 1797, was Caleb Bailey. Villages of Hubert, Rockton, Anderson, Spruce Hill, and Home Camp. Population of township, 616.

Woodward—Erected from Decatur, February 3, 1848, and named for Judge Woodward. In 1818 settled by Henry Cross. Boroughs of Houtzdale and Brisbin, and villages of Stirling, Jefferies, Morann, West Moshannon and McCaulley. Population of township, 2,403.

COUNTY OFFICIALS

Sheriff, Morris S. Jones; prothonotary and clerk of Court of Quarter Session, J. Harold McFadden; register, recorder and clerk of Orphans' Court, George W. Gaylor; district attorney, Edward T. Kelley; solicitor, Smith & Maine; jury commissioner, George B. Shugarts; jury commissioner, Ralph J. Smith; surveyor, E. D. Billette; coroner, Dr. E. S. Erhard; sealer of weights and measures, Percy C. Holton.

CRAWFORD COUNTY

Area, 1,016 square miles. Population, 71,644.

Total taxable valuation for county purposes, \$61,893,369.

Total local taxes collected, \$1,493,649 (1939).

Agriculture—Number of farms, 5,596; acres under cultivation, 202,451; value of lands and buildings, \$18,714,759; value of crops, \$3,645,960.

Manufacturing—Number of establishments, 97; capitalization, \$30,622,200; value of products, \$46,084,500; total number employed, 9,977; total compensation, \$14,360,600.

Crawford County was erected March 12, 1800, from part of Allegheny County, and named in honor of Colonel William Craw-

ford, friend of George Washington, and credited with being the most distinguished frontiersman in western Pennsylvania. He was slain under atrocious circumstances by Indians, June 12, 1782. As indicated earlier in this chapter, the original county practically included the most of northwestern Pennsylvania, possessing jurisdiction over the present Erie, Crawford, Mercer, and Venango counties. This region was the scene of several military campaigns against the Indians in 1793-94, and during the British-American War of 1812. It is one of the best agricultural counties in this part of the State, and the seat of numerous manufacturing concerns.

In writing of Crawford County, the "Pennsylvania Red Book of 1942," says:

"The county has several fine lakes of much beauty, Conneaut Lake, five miles long and two miles wide, being the largest natural lake in Pennsylvania. These lakes and their outlets were very useful in the early canal periods and may again be helpful factors in future transportation. The Pymatuning Dam project, which converted the Pymatuning Swamp into a lake sixteen miles long with a shore line of seventy miles, was completed in 1934 at a cost of approximately \$3,750,000. The dam, one half mile long, and fifty feet high, floods an area of 17,000 acres; it stores water to equalize the flow of the Shenango and Beaver rivers, provides a sanctuary for aquatic life and also adds to the recreation facilities of this section. In area Pymatuning is the largest reservoir in Pennsylvania. Crawford County lies in the western oil and gas belt, and long before the petroleum era, Seneca oil (first used by the Seneca Indians living there) was gathered by skimming the waters of Oil Creek and other streams. Titusville, near where the first producing oil well in the world was drilled by Edwin Drake, who struck oil on August 28, 1859, has for many years been an important oil center."

CITIES

Meadville—First seat of justice in northwestern Pennsylvania, was first known as "Mead's Settlement," after David Mead, who put up a stockade, a small blockhouse and a two-story log cabin, which was a center for many pioneer activities for several decades. The first settlers were the four brothers Mead, David, John, Darius, and Joseph; Thomas Martin, James F. Randolph, John Watson, Cornelius Van Horn, Christopher Snyder, and Thomas Grant, who

camped on French Creek, May 12, 1788. Grant chose the site of what is now Meadville. The village of Meadville became a borough on March 29, 1823, and was incorporated as a city February 15, 1866. It was a rendezvous of the Pennsylvania Militia in the War of 1812. Meadville is the seat of industries, of Allegheny College, of a number of publications, and is an active market center.

Titusville—First of the many cities created and developed by the discovery and commercial production of petroleum, was founded by, and named for, Jonathan Titus, surveyor, who built his cabin here and became known as its first citizen. No special advance marked the



Benson Memorial Library and Woman's Club, Titusville

settlement until Colonel Drake brought in the oil well that initiated one of the greatest industries in the world of today. Titusville was made a borough March 6, 1849; and incorporated as a city, February 28, 1866.

BOROUGHES

Blooming Valley—Incorporated from Woodcock Township, May 17, 1867, and named for its fertile soil. Population, 218.

Cambridge Springs—Located in rich dairy district. Erected from Cambridge Township, April 3, 1866. Popular resort, and seat of Polish Alliance College. Population, 1,807.

Centerville—Established from Rome Township, April 14, 1865. A shipping point for dairy products. Population, 273.

Cochranton—Taken from East Fairfield Township, April 5, 1855. Population, 793.

Conneaut Lake—Incorporated from Sadsbury Township, as the borough of Evansburg, August 9, 1858; name changed November 28, 1892. Ships large amounts of natural ice. Popular resort. Population, 598.

Conneautville—Founded by Alexander Power in 1815. Incorporated from Spring Township in 1843. Seat of Conneautville Vocational School. Population, 965.

Geneva—Geneva Borough annexed to Greenwood Township in 1939.

Hydetown—Incorporated from Oil Creek Township, April 23, 1868. Founded by Jonathan Titus and named by him for family of pioneer settlers and merchants. Population, 446.

Linesville—Founded by Amos Lines and named for him. Incorporated from Pine Township, March 22, 1862. Laid out as a Quaker community settlement in 1825. Railroad shops, silo factory, lumber and flour mills provide employment. Population, 1,150.

Saegerstown—One of the handsomest boroughs in Crawford County. Incorporated from Woodcock Township in 1838, and named for its founder, Daniel Saeger. Dairy products. Population, 753.

Spartansburg—Originally called Akinsville. Established from Sparta Township, January, 1882. Population, 423.

Springboro—First called Spring Corners, then Spring Borough. Taken from Spring Township in 1866. Population, 570.

Townville—Incorporated from Steuben Township in 1867. Population, 294.

Venango—Originally called Klecknerville by its founder, John Kleckner. Incorporated from Venango Township in 1852; both named for the river. Population, 300.

Woodcock—First called Rockville. Incorporated from Woodcock Township in 1844. Population, 119.

TOWNSHIPS

Athens—Formed from Steuben Township in 1829. Villages of Little Cooley, McGinnett, and Rootville. Population of township, 719.

Beaver—An original township, organized July 9, 1800. Villages of Beaver Center, Wing, and Palmer. Population of township, 740.

Bloomfield—Erected from Oil Creek Township in 1811. Canandohtha Lake is within its borders. Villages of Bloomfield, Riceville (formerly a borough), Lincolnville, Tillotson, Sturgis, formerly Chapinville. Population of township, 1,029.

Cambridge—Established from Venango Township in 1852. Borough of Cambridge Springs and village of Drakes Mills. Population of township, 736.

Conneaut—An original township, organized July 9, 1800, and named for Lake Conneaut. Villages of Conneaut Center, Center Road, Steamburg, Penn Line, and Waring. Population of township, 1,208.

Cussewago—Created July 9, 1800, as one of eight original townships of Crawford County. Name derived from its creek. Villages of Crossingville, Mosiertown, Blystone, and Potters Corners. Population of township, 1,035.

East Fairfield—Formed September 10, 1867, from Fairfield Township. Has much rich and tillable soil. Borough of Cochran-ton and villages of Pettis and Shaw. Population of township, 531.

East Fallowfield—Organized from Fallowfield Township, an original township, when it was divided to form East and West Fallowfield in 1841. Mud Lake is within its limits. Villages of Atlantic and Stony Point. Population of township, 934.

East Mead—Erected when Mead, an original township, was divided, February 14, 1898, to form East and West Mead. Villages of Wayland, Frenchtown, and Bousson. Population, 812.

Fairfield—Organized July 9, 1800, upon the erection of Crawford County. Village of Calvin Corners. Population of township, 738.

Greenwood—Erected from Fallowfield and Fairfield townships, in 1829. Geneva Borough annexed to Greenwood Township in 1939. Borough of Geneva and villages of Custards, Colton, and West Greenwood. Population of township, 1,417.

Hayfield—Organized in 1829 from Mead, Venango, Cussewago and Sadsbury townships. Villages of Hayfield, Norrisville, Littles Corner, and Coon Corners. Population of township, 1,488.

North Shenango—Erected from a division of Shenango Township in 1830. Valleys contain rich farm land. Pymatuning Dam in this township. Villages of Espyville Station, Espyville, and Stewartville. Population of township, 488.

Oil Creek—Name derived from its creek. An original township, organized October 8, 1800. City of Titusville, borough of Hydetown, and villages of East Titusville, Gresham, Shelmadine Springs, and Thompson's Mills. Population of township, 1,513.



(Holmes Crosby, Architect)

Colestock High School, Titusville

Pine—Formed in 1845 from a part of North Shenango Township. Borough of Linesville. Population of township, 263.

Randolph—Organized in 1824 from parts of Mead, Rockdale, and Oil Creek townships. Named for James F. Randolph, one of the original settlers. Villages of Randolph, Guy's Mills, Guichard, Black Ash, Sugar Lake, and Basil. Population of township, 1,578.

Richmond—Erected in 1829 from Rockdale and Randolph townships. Site of the home and tannery of John Brown, of abolitionist fame, 1826 to 1835; the tannery has been restored and is in the keeping of the John Brown Memorial Association. Villages of New

Richmond, Lyona, Teepleville, Jewel, and Pinney Corners. Population of township, 1,010.

Rockdale—Created October 8, 1800, an original township; reformed in 1829. Villages of Miller's Station, Brown Hill, and Mackey Hill. Population of township, 782.

Rome—Formed from Bloomfield and Oil Creek townships, in 1829. Borough of Centerville and villages of Buell, Vrooman, Fink, Sturtevant, and Mayestown. Population of township, 892.

Sadsbury—An original township, organized July 9, 1800. Larger part of Conneaut Lake is within its limits. Borough of Conneaut Lake and villages of Evansburg, formerly a borough, Shermansville, Gehrton, and Tamarac. Population of township, 1,103.

South Shenango—Erected by a division of Shenango Township in 1830; part of Jamestown Borough and villages of Westford, Marshall Corners, and Lewis Corners. Population of township, 654.

Sparta—Organized in 1829 from Bloomfield Township. Clear Lake is within its limits. Borough of Spartansburg and villages of Britton Run and Glyndon. Population of township, 876.

Spring—Erected from Beaver and Cussewago townships in 1829. First called Snowhill Township. Boroughs of Springboro and Conneautville and villages of Rundell, Hickernell, and Shadeland. Population of township, 1,296.

Steuben—Formed in 1850 from Troy and Athens townships. Borough of Townville and villages of Tyronville, Gray's Mills, and Clappsville. Population of township, 595.

Summerhill—Erected in 1829 from New Township. Part of Conneaut Lake and village of Dicksonburg. Population of township, 830.

Summit—Established on March 17, 1843, from Sadsbury and Summerhill townships. Part of Conneaut Lake and villages of Harmonsburg and Exposition Park are within its limits. Population of township, 1,097.

Troy—Organized in 1829 from Oil Creek, Randolph and Wayne townships. Villages of Troy Center, Fauncetown, Lucas Corners, and Armstrong Corners. Population of township, 949.

Union—Formed in 1867 from Vernon, Greenwood, and Fairfield townships. No villages. Population of township, 445.

Venango—An original township, created July 9, 1800. Borough of Venango. Population of township, 431.

Vernon—Erected from Mead and Sadsbury townships in 1829. Part of city of Meadville and villages of Kerrtown, Watson Run, and Fredericksburg. Population of township, 2,977.

Wayne—Established in 1809 from Mead, Randolph, and Troy townships. Sugar Lake is within its limits. Villages of Deckard and Wilson Mills. Population of township, 916.

West Fallowfield—Founded by a division of Fallowfield in 1841. Part of Mud Lake, borough of Hartstown and village of Adamsville are within its limits. Population of township, 476.

West Mead—Erected from Mead, when divided February 14, 1898, to form East and West Mead townships. Ponce de Leon Springs and city of Meadville. Population of township, 3,749.

West Shenango—Formed by a division of Shenango Township in 1863. Villages of Turnersville, Rayalton, and Simons. Population of township, 184.

Woodcock—Formerly called Rockville when incorporated as Woodcock in 1844 out of Woodcock Township. Boroughs of Blooming Valley, Saegerstown, and Woodcock and villages of Long's Stand and Patrons. Population of township, 1,399.

COUNTY OFFICIALS

Sheriff, Bert A. King; prothonotary, Paul D. Slayton; register and recorder, Ray F. Smock; clerk of Court of Quarter Sessions and Orphans' Court, Martha E. Britton; district attorney, Herbert A. Mook; solicitor, Walter J. McClintock; jury commissioner, N. B. Graham; jury commissioner, George J. Slattery; coroner, Luther B. King; sealer of weights and measures, Harry Britton.

ELK COUNTY

Area 809 square miles. Population, 34,443.

Total taxable valuation for county purposes, \$13,848,705. Total local taxes collected, \$549,803 (1939).

Agriculture—Number of farms, 720; acres under cultivation, 22,116; value of lands and buildings, \$2,374,800; value of crops, \$421,190.

Manufacturing—Number of establishments, 51; capitalization, \$19,752,800; value of products, \$22,874,500; total number employed, 4,712; total compensation, \$6,532,600.

Elk County was erected from parts of McKean, Jefferson and Clearfield counties on April 18, 1843, deriving its name from the fact that it was a section which was a favorite feeding ground for elk. It is strange to read that in 1832 Judge Geddes stated that there were few elk still in the region. Lumbering, tanning (there was a great deal of hemlock and oak in the section) were the early outstanding industries, and the production of leather is still a highly important business. Petroleum, natural gas, coal and clays are found in commercial quantities. John Wade is named as the first permanent settler of the county, locating in 1798 in the vicinity of what is now Ridgway.



Knights of Columbus Building, St. Mary's

BOROUGHs

Ridgway—County seat, and deriving its name from Jacob and John J. Ridgway, was laid out as a village in 1833, and organized as a borough February 15, 1881. The Ridgways, Philadelphia merchants, owned an immense acreage (40,000 acres) in Elk County, and platted the village. Enos Gills is recognized as its first settler, 1822. Wilcox, Brandy Camp and St. Marys all competed for the seat of justice, Ridgway being the winner. Population, 6,253.

St. Marys—Largest borough of Elk County, was founded in 1842 by the German Union Bond Society of Baltimore and Philadel-

phia, a German Catholic brotherhood, which purchased 35,000 acres of forest land in what was then Jefferson and McKean counties, and now Benzinger Township. On October 28, 1842, one party of Colonists set out from Philadelphia, and another from Baltimore, they met at Columbia, Lancaster, and completed their journey December 8, the date of the feast of the Immaculate Conception of the Virgin Mary, and as the name of the first white woman who trod the soil also being Mary, the Colonists called the place St. Marys. It was laid out and incorporated March 3, 1848. On July 22, 1852, the first convent of the Benedictine Order in the United States was established at St. Marys. Population, 7,653.

Johnsonburg—In Ridgway Township, has successively borne such names as Coopersburg and Quay, eventually receiving its present title from the traditional pioneer of the site, David Johnson. It was settled in 1810 and became a post office and borough in 1888. It is widely known for its large paper mill and tannery. Population, 4,955.

TOWNSHIPS

Benezette—An original township. It and the village of the same name were founded by Reuben Winslow. Coal and clay abound. Other villages are Medix Run, Grantonia, Dent Run, and hamlets of Wilmer and Mount Pleasant Station. Population of township, 526.

Benzinger—Named for Colonel Matthias Benzinger, an enterprising citizen of Baltimore, who, with Mr. Eschbach, purchased the land which is now St. Marys Borough. Coal, clay and rich agricultural lands produce the resources. Borough of St. Marys and villages of Rathbun and Benzinger. Population of township, 2,624.

Fox—Erected February 27, 1814, and is an original township in Elk County. Originally called Sinnamahoning, but changed in honor of Samuel M. Fox. The village of Centerville, laid out by John Green, in November, 1846, named changed to Kersey in 1893, and Earley and Dagus Mines. Population of township, 2,508.

Highland—Formed on April 8, 1850, from Ridgway Township and named for its high altitude. Large coal deposits and mercantile center. Villages of Chaffee, DeYoung, Nansen, Carlo, Sackett, Corduroy, and hamlets of Highland, Carlson, and James City, now known as Durant City. Population of township, 1,161.

Horton—Erected from Fox Township, April 8, 1850, and named for Isaac Horton, an early settler. Coal, limestone and clay

deposits. Township was center of coal interest in the county for more than fifty years. Villages of Brockport, Cartwright, Elbon, Brandy Camp, Mead Run, Helen Mills, Hyde, and Shawmut. Population of township, 1,606.

Jay—Organized from Fox Township before the county was organized. Principal village is Weedville, with coal mines, bridge, iron and steel works. Other villages, Byrnedale, Caledonia, Force, and Cardiff. Population of township, 2,319.



Centennial High School, Ridgway

Jones—An original township, and the largest in the county. An ancient Indian village has lately been discovered here, which was stockaded, and was very large and formidable. Coal, oil and limestone underlay the region, and there are large tanning interests. Villages of Wilcox, Glen Hazel, Straight, Instanter, Rasselas, and Dahoga. Population of township, 1,855.

Millstone—Formed from Spring Creek Township, March 9, 1870. Settled in 1826 and named for its stream. Natural gas and agriculture. Villages of Millstone and Raught. Population of township, 166.

Ridgway—An original township, erected in 1833. It and the county seat were named in honor of Jacob Ridgway, a wealthy landowner. Lumber and fire clay products are chief resources. Borough

of Ridgway, county seat, and Johnsonburg, and villages of Dagushahonda, Rolfe, and Interchange. Population of township, 2,375.

Spring Creek—Named after its native creek. Organized as early as 1846. Valuable coal deposits extensively worked. Villages of Arroyo, Portland Mills, Hartman, Empire, Hallton. Population of township, 442.

ERIE COUNTY

Area, 812 square miles. Population, 180,889.

Total taxable valuation for county purposes, \$169,357,188. Total local taxes collected, \$5,941,412 (1939).

Agriculture—Number of farms, 4,503; acres under cultivation, 167,034; value of lands and buildings, \$18,706,391; value of crops, \$4,126,090.

Manufacturing—Number of establishments, 367; capitalization, \$72,070,400; value of products, \$165,045,000; total number employed, 30,398; total compensation, \$46,258,800.

Erie County furnished the Commonwealth with its only outlet on the Great Lakes, some fifty miles, but with plenty of room for the largest port on Lake Erie. Its interesting feature to the geographically minded is the triangle formed by an extension of the south boundary of New York, a short line limiting the western extension of New York and the "Lake." To General William Irvine is due all honors for securing for Pennsylvania "The Erie Triangle," which was once claimed by Massachusetts, Connecticut, New York and the Five Nations. To settle the conflicting claims, the United States Government purchased this disputed territory in 1788, and sold it to Pennsylvania for \$151,640.25 in Continental scrip, or about seventy-five cents an acre. The final deed bears the date April 3, 1792.

French explorers and voyageurs knew well the lake part of the "Triangle," and gave a name to the peninsula which is now so beautiful a part of the city of Erie, Presqu' Isle. In 1753 they erected a fort here, although there are maps showing that the French had explored the region certainly prior to 1739. The French were driven from their fort in 1758. It was captured by the Indians in 1763, but restored to the English a year later. The Eries or "Wildcat Tribe" lost the region to the Iroquois in about 1654, and far more than a century later, Brant, the Mohawk chieftain, made settlement by the whites almost impossible.

The War of 1812; the building of a fleet of nine vessels for Commodore Perry during the months from February to August, 1813, and his victory over the British, winning control of Lake

Erie on September 10, 1813, are important incidents in the history of the county and city. George Washington, while a young major, General "Mad" Anthony Wayne, Perry, Irvine, Ellicott, Gallatin, were but a few of the early notables identified with Erie and war. It was, indeed, war that held the development in check until well on into the nineteenth century. When the county was set up from Allegheny County, by an Act of March 12, 1800, there were fewer than 1,500 people in its great area. For reasons already explained in this chapter, the county of Erie was not fully organized judicially until April, 1803, when Judge Moore held the first court.

CITIES

The metropolis of northwestern Pennsylvania, *Erie*, has a history coeval with that of the county in many respects. It was on its present site that the French, in 1753, built Fort Presqu' Isle, now usually spelled Presque Isle. It was laid out as a town in 1795, made the county seat in 1803; incorporated as a borough two years later and, in 1851, received a city charter. Erie has almost everything that could be asked of a large city—transportation of all kinds, industries, commerce, natural and developed beauties, homes, churches, theatres, schools and colleges, institutions, parks—and even is a noteworthy summer resort. Pages of statistics can be presented to prove any of the above and more points, and its history comes to the fore in nearly every chapter of this work. Erie's municipal limits include an area of twenty and one-half square miles, with immediately touching suburbs, that make the real metropolis much larger and more populous. According to the Census of 1940 the limited area had a population of 116,955.

Corry—The second city of Erie County, is a comparative youngster as regards birth, and thoroughly modern as regards present status. While there may have been trappers and non-permanent settlers in earlier days, it is usually credited with becoming a settlement in 1861. It was made a borough in 1863, chartered as a city in 1865, and derives its name from Hiram Corry, owner of the tract of land purchased by the old Atlantic & Western Railroad as a junction point of its system. Blessed with exceptional shipping facilities, almost from the first it became an industrial center and ultimately became the home of such large corporations as the Ajax Iron Works, the Aero Supply Corporation, Curry-Jamestown Manufacturing Company, the J. W. & A. P. Howard Company, the Raymond Manufacturing Company, and smaller plants. Population, 6,935.

BOROUGHs

Albion—(Formerly called Jackson's Cross Roads, Jacksonville, Joilet, and finally Albion), was incorporated from Conneaut Township in 1861. Population, 1,604.

Cranesville—Settled by Fowler Crane in 1800 and named for him, was incorporated March 30, 1912, from Elk Creek Township. Population, 548.

East Springfield—Incorporated from Springfield Township, September 5, 1887. Population, 415.

Edinboro—Formed from Washington Township in 1840. With frontage on Lake Conneauttee, it is a popular resort. Seat of State Teachers College. Population, 804.

Elgin—First known as Hall Town, from Joseph Hall, who built a grist and sawmill here. The railroad named the station Concord, but when incorporated the name was changed to Elgin. Incorporated from Concord Township, February 8, 1876. Population, 224.

Fairview—Named by its founder, Colonel Thomas Forster, for its delightful location. Incorporated from Fairview Township in 1868, it was originally called Sturgeonville. Population, 555.

Girard—Incorporated from Girard Township in 1846 and named for Stephen Girard, noted philanthropist. Dan Rice, the celebrated showman, was born and resided here. Seat of the Sacred Heart Mission House. Chief products mechanical toys, wrenches, wooden ware specialties, foundry, tannery. Population, 1,732.

Middleboro—Established from McKean Township in 1861. Named for its geographical position. Settled in 1810. Dairy products. Population, 320.

Mill Village—Named for the stream called Mill, and first known as Milltown. Incorporated from LeBoeuf Township in 1870. The railroad station was called Mill Village, which is the incorporated name. Dairy products and planing mill. Population, 259.

North East—Formed from North East Township, February 27, 1834. Seat of Saint Mary's Catholic College, and Saint Barnabas Episcopal Home. Center of grape growing district. Chief products, electrical materials and specialties, copper products, motor specialties, artificial bait, flour mills. Population, 3,704.

North Girard—Incorporated from Girard Township in 1926. Population, 1,108.

Platea—The town has been known as Lockport. Settled in 1840 and named for the many locks in the canal, twenty-eight within a distance of two miles. Incorporated from Girard Township in 1870. Population, 281.

Union City—First named Union Mills; named changed in 1871. Incorporated from Union Township in 1865. Center of chair industry, and is sometimes called the "Chair City"; other wood products include juvenile furniture, sash and doors, brooms, handles, milk products. Population, 3,843.

Waterford—Originally laid out by the Commonwealth, incorporated from Waterford Township, April 8, 1833. Occupies site of old French Fort LeBoeuf, erected in 1753, at the headwaters of the Allegheny River. Here Major George Washington received the unfavorable reply of the French commandant, De Saint Pierre, in December of the same year. The Washington Memorial commemorating the event was dedicated in 1922. Waterford was laid out in 1795 by Andrew Ellicott. Both borough and township are believed to have been named in deference to the Irish settlers, some of whom came from County Waterford. General Strong Vincent, who fell a hero at Gettysburg, was a native of this borough. Population, 804.

Wattsburg—Laid out in 1796 and named by William Miles, its founder, for David Watts, his father-in-law. Incorporated in 1833 from Venango Township. Center of butter making district. Population, 290.

Wesleyville—Incorporated from Harbor Creek Township, May 31, 1912. Laid out in 1828 by John Shaddock and named for John Wesley, father of Methodism. Shaddock erected a Methodist Church, the first place of worship in the town. Station of the "Underground Railway" in Civil War times. Part of Harborcreek Township annexed to Wesleyville Borough in 1934. Population, 2,918.

TOWNSHIPS

Amity—Erected from Union Township in 1825. Historic French Creek flows through the township. Earliest settler was William Miles, in 1796, who suggested the name of Amity. Other early settlers of about the same time were John Fagan and William McGahan. Villages of Milltown, Hatch Hollow, Arbuckle, Carter's Corners, and Juva. Population of township, 713.

Concord—First called for its stream, an Indian word meaning "prairie grass," was an original township, erected from Brokenstraw

Township. Name was changed to Concord in 1821 and, in 1826, the township was divided by the erection of Wayne. First settlers were William Miles and William Cook, the former suggesting the name of Concord. Part of the city of Corry, the borough of Elgin and villages of Lovell, Concord, Stewart Station, and Summit Station. Population of township, 868.

Conneaut—An original township, named for its stream, which is an Indian word meaning "it is a long time since they went"; another authority gives its meaning as "snow place." Jonathan Spaulding was pioneer settler in 1795. The Population Company, Holland Land Company, and Stephen Girard all owned land in the township, and upon the death of the latter-named his lands were willed to the city of Philadelphia. Borough of Albion and villages of Keepville, Cherry Hill, Tracy, Pennside, Wanneta, Lexington Station, Ackerley Corners, and Knapp's Corners. Population of township, 1,374.

Elk Creek—First settler was Eli Colton in 1797. An original township, named for its stream. Borough of Cranesville, villages of Wellsburg, Lundys Lane, Lavery, Pageville, Pont, and Pleasant Valley. Population of township, 1,210.

Fairview—First settled in 1797 by Francis Scott. Original township. Several incorporators of the Harrisburg & Presqu' Isle Company moved into the county, and Colonel Thomas Forster, one of the officers, named the township. Northern line is on Lake Erie. Borough of Fairview and villages of Swanville and Avonia. Population of township, 1,479.

Franklin—Erected from McKean, Washington, and Elk Creek townships in 1844, and named for Benjamin Franklin. First settled in 1802. Villages of Franklin Corners, Ivarea, Eureka Corners, and Mishler Corners. Population of township, 759.

Girard—Created in 1832 from Springfield and Fairview townships, and named in honor of Stephen Girard. William Silverthorn and his son were the pioneer settlers in 1798. Township fronts on Lake Erie and has some of the best farms in the county. Boroughs of Girard, North Girard, and Platea and villages of Fair Plain, Wallace Station, Little Elk, Francis, Cross, Thornton, and Erie County Home. Population of township, 1,552.

Greene—An original township, called Beaver Dam until 1840, when the name was changed to honor General Nathanael Greene, of

Revolutionary fame. Peter Himebaugh and Conrad Wineman, who arrived about 1800, were first settlers. Dairy products are chief industry. Villages are East Greene, West Greene, Clipper, Hammett, Six Mile Creek, Yapple Corners, and Sampson Station. Population of township, 1,516.

Greenfield—Pioneer settler was Judah Colt, of Connecticut, in 1797, who came as agent for the Population Company. Original township. Henry Taylor, who became captain of the first company raised in the county, War of 1812, was another pioneer settler. Villages of Greenfield, Colt, Little Hope, Ashton, Hornby, Delhil, and Nasby. Population of township, 854.

Harbor Creek—Erected in 1800, an original township. In 1796, Thomas Rees, the first surveyor of the county, settled here. General William Irvine, of Carlisle, was donated a tract of 2,000 acres here for Revolutionary War services. Borough of Wesleyville, villages of Harbor Creek, Moorhead, Moorheadville, Potter's Corners, Bascombel, and Shorewood, a popular summer resort. Population of township, 3,602.

Lawrence Park—Formed in 1926 from Mill Creek Township and named for Perry's flagship. There are two small parks in this region, Driving Park and Four Mile Creek Park. No villages. Population of township, 3,120.

LeBoeuf—The French named the fort at present Waterford Fort LeBoeuf, which was called for the creek of the same name, meaning "the bull" or "the buffalo." Original township. Captain Robert King settled here in 1794. Pennsylvania donated 2,500 acres in Erie County to the Moravians, April 17, 1794, in recognition of the missionary work they had done among the Indians, and they chose the land in two tracts, one in LeBoeuf Township called "Good Luck," and the other in Conneaut and Springfield townships they called "Hospitality." Borough Mill Village and villages of LeBoeuf, New Ireland, and Mystic. Population of township, 896.

McKean—Named for General Thomas McKean, then Governor of Pennsylvania. Original township. James Talmadge was pioneer settler in 1795. Borough of Middleboro and villages of Sterretania, Branchville, Reed's Corners, McKean, and Sibleyville. Population of township, 1,360.

Mill Creek—Erected in 1800; original township; named for its stream. The township practically surrounds the city of Erie and has

a long lake front. Pennsylvania Germans, from Lancaster County, and Scotch-Irish and English under the leadership of Captain John Grubb, settled here in 1795. Colonel Seth Reed was another prominent first settler. Villages of West Mill Creek, present Westminster, Kearsarge, Belle Valley, Thickett, Shannon, Cascade, Asbury Chapel, Lowry's Corners, Waldameer Park, and Presqu' Isle Park. The old county farm is in this township. Population of township, 7,444.

North East—Originally called Lower Greenfield. An original township, named for its locality, adjoining New York State. Has eight-mile frontage on Lake Erie. Settled by Joseph Shadduck and Henry Hurst, in 1705. Borough of North East, villages of Northville, State Line Station, Orchard Beach, Freeport, and Grahamville. Population of township, 2,400.

Springfield—Organized in 1800. In 1796 Captain Samuel Holliday was the first settler. Borough of East Springfield, villages of North Springfield, West Springfield, Merritt, Crayton, Hewett. Population of township, 1,394.

Summit—Taken from Greene, McKean and Waterford townships in 1854, and so named because it contains the dividing ridge, streams emptying into LeBoeuf, flow into the Gulf of Mexico, and those of Walnut Creek into the Great Lakes and Atlantic Ocean. Pioneer settler was George W. Reed in 1796. Villages of Godard, Jackson, Sampson, Langdon, Five Points. Population of township, 1,321.

Union—First permanently settled in 1797. Hugh Wilson was pioneer settler in 1797. Borough of Union City, villages of Ferdinand, Pine Run, Reilly, and Kimble Corners. Population of township, 1,172.

Venango—Part of the Erie Triangle. Original township, named for its river. William Miles was first known settler in 1785, arriving here as surveyor with David Watts and settling here in 1795. Lake Pleasant is in southwestern corner. Borough of Wattsburg and villages of Lake Pleasant, Lowville, Philipsville, Anson, Titus Corners, and Page Corners. Population of township, 943.

Washington—An original township, first called Conneauttee, name changed to Washington in 1834. William Culbertson and Alexander Hamilton were first settlers in 1796. Conneauttee Lake is contiguous to Edinboro, the only incorporated borough. Villages of Itley, McLane, McLallen Corners, Power's Corners, Sherwood

Hill, Taylor's Corners, Cumming's Corners, McClelland's Corners, and Phelps Corners. Population of township, 1,374.

Waterford—Named in honor of Irish settlers, many of them from County Waterford; an original township. The Tenth Donation District commenced in this township. Lake LeBoeuf touches the borough limits. Villages are Waterford Station, Sharps Corners, and Valley Church Corners. Population of township, 1,280.

Wayne—Formed from Concord Township in 1826 and named for General Anthony Wayne, Revolutionary hero and great Indian fighter, who died at Presque Isle on his return from a successful treaty with the Western Indians. State fish hatcheries are located here. Part of city of Corry and villages of Ovid, Katan, Wheelock, Childs Station, Beaver Dam, Wheelock Church, Five Points, and Raymonds Corners. Population of township, 959.

COUNTY OFFICIALS

Sheriff, Fred W. Lamberton; prothonotary, Lawrence W. Taylor; register and clerk of Orphans' Court, Ralph B. McCord; recorder, Harry Miller; clerk of Court of Quarter Sessions, George L. Wilson; district attorney, Burton R. Laub; solicitor, J. B. Held; jury commissioner, Harry E. Wagner; jury commissioner, Katherine T. Leary; coroner, Dr. W. G. Stroble; sealer of weights and measures, Park M. Skelton.

FOREST COUNTY

Area, 420 square miles. Population, 5,791.

Total taxable valuation for county purposes, \$2,661,064.

Total local taxes collected, \$67,929 (1939).

Agriculture—Number of farms, 276; acres under cultivation, 8,640; value of lands and buildings, \$720,490; value of crops, \$158,770.

Manufacturing—Number of establishments, 11; capitalization, \$1,223,100; value of products, \$3,217,600; total number employed, 463; total compensation, \$586,900.

Forest County, as the name indicates, was named for its principal resource at the time of its erection, April 11, 1848. After a number of years as a center of lumbering operations on a large scale, other industries were developed in oil, natural gas, shale brick, glass sand and agriculture, the latter confined to the rather narrow valleys. At the time of its establishment, the territory of Forest County was taken from Jefferson County, but in 1866 it was enlarged from land

given over by Venango County. According to the historian, F. A. Godcharles:

"Rev. David Zeisberger, the celebrated Moravian missionary, led his Indian converts there in 1767 and established three villages during his stay of two years, at present Tionesta, Holeman's Flats, and Hickory. The first permanent settler in the county was Cyrus Blood, an educator and surveyor, who had been principal of Chambersburg Academy, Hagerstown Academy, and in the faculty of Dickinson College. He migrated to this region with his family in 1833, and settled the hamlet Blood's Station. He carefully laid out a town called Marion, now Marienville, after his daughter, which became the seat of justice until October 31, 1866, when five townships of Venango County were annexed to the county and Tionesta was selected to replace Marienville as the county seat. Among pioneer settlers was George Siggins, in 1818, and his descendants still reside at West Hickory."

BOROUGH

Tionesta—The county seat and the sole borough of Forest County, was taken originally from the township of the same name, in April, 1850, while still a part of Venango County. Its site was first owned by John Range, Revolutionary War officer, who obtained his warrant in 1816. Tionesta was made the county seat on October 31, 1866, incorporated as a borough during the following year, and derives its name from the Iroquois term, meaning "it penetrates the land." Natural gas was discovered here in 1886. Population, 845.

TOWNSHIPS

Barnett—Has coal deposits but little use was made of it. Organized January 8, 1854, as an original township. Villages of Cooksburg, Redclyffe, and Clarington. Population of township, 533.

Greene—Noted for the geometrical lines on which it was planned, is very stony, rather infertile and lumber and coal are its principal money-makers. Villages of Nebraska and Golinza. Population of township, 272.

Harmony—Had a great history as an oil center and still produces some. The great fire of 1874 practically destroyed the settlements. Villages of Stewart's Run, Trunkeyville, West Hickory, and Neilltown are within its limits. Population of township, 776.

Hickory—Is lumber and farm district. Township erected in Venango County. Villages of East Hickory and Endeavor and the county home are located here. Population of township, 722.

Howe—Erected from Tionesta Township. Has many fine coal veins that are being mined; also lumber and huge tanneries. Villages of Brookston, Minister, Pigeon, Truemans, Frost Station, Cooper Tract, Byromtown, Lynch, Sheriff, Watson Farm, Pebble Dell, Porkey, Sheffield Junction, and Balltown. Population of township, 453.

Jenks—The most central of the townships, has its prosperity from lumber, oil and glass works. The principal town is Marienville, formerly the county seat. Other villages are Duhring, McCray, Williams, Roses, Parrish, and Gilfoyle. Population of township, 1,224.

Kingsley—Named after one of the pioneers of this region. Huge lumber operations are in the village of Kellettville; other villages are Starr, Mayburg, Whig Hill, and Newtown Mills. Population of township, 485.

Tionesta—Dates from 1795, an original township. Tionesta, the county seat, and villages of Tionesta Station, Jamison, and Hunter. Population of township, 481.

COUNTY OFFICIALS

Sheriff, J. Bruce Hagerty; prothonotary, register, recorder and clerk of Quarter Sessions and Orphans' Court, J. N. Bankhead; district attorney, M. A. Carringer; solicitor, A. C. Brown; jury commissioner, Charles Clark; jury commissioner, Edward Mensch; associate judge, E. S. Blauser; associate judge, Edwin Otto Burcher; coroner, Eugene Pifer; sealer of weights and measures, J. B. Carlos.

JEFFERSON COUNTY

Area, 652 square miles. Population, 54,090.

Total taxable valuation for county purposes, \$27,096,444.

Total local taxes collected, \$790,922 (1939).

Agriculture—Number of farms, 2,356; acres under cultivation, 97,546; value of lands and buildings, \$6,844,240; value of crops, \$1,530,440.

Manufacturing—Number of establishments, 66; capitalization, \$5,974,300; value of products, \$7,076,400; total number employed, 1,970; total compensation, \$2,360,700.

Jefferson County, lying in the former great pine forest section, was formed from Lycoming County on March 26, 1804, together

with the counties of McKean, Clearfield, Tioga, and Potter. It was not fully organized for judicial purposes until 1830. As early as 1772, a number of Christianized Delaware Indians remained in this section for a time. At their head was the famous Moravian missionary, John Ettwein, who praised the value of the country, but abhorred its "punxies" or gnats. The first white settler of Jefferson County was Joseph Barnett, who established Fort Barnett in 1797. Situated on the Allegheny Plateau, the region is well mineralized and possesses natural gas and petroleum fields, commercial shales, clay, sands and limestone.

BOROUGHES

Punxsutawney—The largest borough, which is also the oldest town in the county. It was incorporated from Young Township in 1849, with a population of 100, and long has been known as Punxsutawney, from the Iroquois, meaning "the sand-fly (gnat) place," a pest that discouraged many a pioneer. Missionary John Ettwein tried to start a settlement on the site in 1772, with his aforementioned Indian converts, numbering about 240 people, but the gnats proved too much and the whole group went on to Ohio. As Gnat-town the whites made it into a fine hamlet. The Moravians called it Ashtown, from the amount of black salts (pot ash) which was derived from the ashes of burnt trees. Population, 9,482.

Brookville—The county seat, located in Rose Township, was chosen as the seat of justice in 1830, and laid out as a village. It reached the status of a borough in 1843. Its name is derived from the springs and brooks that bordered its locale. Part of Rose Township was annexed to Brookville Borough in 1932. Population, 4,397.

Reynoldsville—Settled in 1824, on the site of an old Indian village, has borne the name Olney, and parts of it were once known as Prospect Hill and Ohiotown. It adopted the present title in 1850, from Thomas and Woodward Reynolds, who came there in 1838. West Reynoldsville, formerly Ohiotown, was annexed to the borough in 1914, not long before the incorporation of the borough on May 25, 1915. Population, 3,675.

Big Run—Named for its stream, called by the Indians Garyar-nese, meaning "big run." First settled in 1831, for a long time was the only post office in the region. Incorporated September 12, 1867. Has been successively a lumber, coal, and at present, tannery town. Population, 963.

Brockway—Incorporated in 1883, was one of the early sawmill towns. Settled by Alonzo and Chauncey Brockway in 1822, and named for them when the town was laid out in 1836. Until recent years was called Brockwayville. Glass, coal, clay, macaroni and agriculture are chief products. Population, 2,709.

Corsica—Erected from Union Township, March 22, 1860. Laid out as a town in August, 1847. Nearly destroyed by fire June 2, 1873. Coal mining and tannery products. Population, 481.

Falls Creek—Incorporated from Washington Township, August 18, 1900. Owes its birth largely to Hon. Joseph P. Taylor, who, in 1891, platted the town and induced most of the industrial plants to locate here. Chief products, leather, plate glass, and planing mill. Population, 1,258.

Summerville—Was made a borough from Clover Township, in March, 1887. Coal mines, grist and planing mills. Population, 1,009.

Sykesville—Taken from a part of Winslow Township, March 14, 1907, and named in honor of Jacob B. Sykes, a prominent citizen. Brick, tiles, shirts, glass, coal, coke, oil and gas. Population, 2,044.

Timblin—Incorporated from parts of Porter and Ringgold townships in 1922. Population, 454.

Worthville—The smallest borough in the county, incorporated from Beaver and Ringgold townships, April 1, 1878. Known as Geistown until 1854, when the postal authorities had it changed to its present title. Population, 105.

TOWNSHIPS

Barnett—Organized from Rose Township in 1833 and named for Joseph Barnett, pioneer of Jefferson County. The Armstrong family first settled here in 1827. Underlaid with coal, iron ore and limestone. Villages of Ella and Hominy Ridge. Population of township, 179.

Beaver—Erected in 1850, named after Beaver Run, taken from Clover and Ringgold townships. First settlement made by Hulet Smith, 1816. Coal, iron ore, limestone, and generally fertile soil. Part of the borough of Worthville and villages of Heathville, Pleasantville, Langville, Patton Station, Pansy, Ohl, and Conifer. Population of township, 788.

Bell—Named in honor of James H. Bell, incorporated from Young Township in 1857. Nathaniel Tindell and Dr. Jenks were pioneer settlers in 1818. Farming region. Villages of Cloe, Bells Mills, Finley Mills, Williams, Furnanda, Albion, Spintletown, Elbell Station, and Canoe Creek Station. Population of township, 1,623.

Clover—Erected from Rose Township in 1841 and named for Levi G. Clover, then prothonotary of the county. In 1812 Samuel Baldwin was the pioneer settler. Salt industry was first one of importance. Underlaid with coal and limestone. Borough of Summerville and villages of Glenn, Baxter, and Content. Population of township, 540.

Eldred—Named after Nathaniel B. Eldred, presiding judge, organized from Rose and Barnett townships in 1836. Isaac Matson was the pioneer settler in 1828. Agricultural region. Villages of Sigel, Howe, Crawford Pump Station. Population of township, 1,205.

Gaskill—Taken from Young Township in 1842 and named for Charles C. Gaskill, agent of the Holland Land Company. Winslow Carpenter and family settled here in 1818. A good agricultural region, and formerly much lumber was marketed. Villages of Winslow, Hudson, Bowersville, and Hillman. Population of township, 680.

Heath—Erected in 1847, from Barnett Township, and named for Elijah Heath, associate judge and early settler. Was originally a lumber district, now agriculture and oil are chief pursuits. Villages Melzer, Dunkle, and Cross Pump Station. Population of township, 203.

Henderson—Organized from Gaskill Township in 1857 and named in honor of Joseph Henderson, then associate judge. Joseph Potter was pioneer settler in 1823. The cleared land has proved fertile, fitted for stock raising. Borough of Big Run and villages of Desire, Cramer, Stump Creek, and Clouser. Population of township, 1,784.

Knox—Taken from Pine Creek Township in 1853 and named for Judge John C. Knox. Joseph Karr was pioneer settler in 1817. Underlaid with coal, limestone, fire clay, and gas deposits. Villages of Knoxdale, Ramsaytown, Norman, Colon, Tait, Green Valley, Barnes, Fuller, Iowa, and Erdice. Population of township, 1,412.

McCalmont—Named after Judge John S. McCalmont, presiding judge, and erected from Young Township in 1857. Settled in 1830, and in the early days was known as "Shamoka." Veins of excellent coal. Villages of Eleanor, Eleanor Mines, Florence, Cortez, Anita, Battle Hollow, Panic, and Desire. Population of township, 1,521.

Oliver—Established from Perry Township in 1851 and named for Commodore Oliver H. Perry, hero of battle of Lake Erie. Reuben Hickox was first settler in 1822. Fruit growing, coal, iron ore, limestone and fire clay. Villages of Oliveburg, Coolspring, Sprinkle Mills, Norena, East Branch, Markton, and Coulter. Population of township, 993.

Perry—Organized in 1817, settled as early as 1809. Named in honor of Commodore Oliver H. Perry, of Lake Erie fame. Villages of Hamilton, Fordham, Frostburg, Grange, Valier, Whiteville, Perryville. Population of township, 1,626.

Pinecreek—Created in 1806 and named for its abundance of fine forest and stream of the same name large enough to float the logs. Embraced the whole of Jefferson County until 1818, when Perry was organized. Barnett family were pioneer settlers. Coal is chief industry; sandstone and fire clay also abound. Villages of Port Barnett, Iowa, Fuller, Meredith, Emerickville, Sulger, South Sulger, Kirkman, Bell, Erdice, and Camp Run. The county farm is in this township. Population of township, 1,378.

Polk—Named for President James K. Polk; erected from Warsaw and Snyder townships in 1851. Paul Vandervort came here prior to 1838. Coal and limestone. Villages of Munderf, Schoffner's Corners, Green Briar, Smith Camp, White Pine, Blowtown. Population of township, 332.

Porter—Erected from Perry Township in 1840 and named for David R. Porter, then Governor of Pennsylvania. First settler was James McClelland, in 1803. Good coal, limestone and fertile soil. Only village is Porter. Population of township, 586.

Ringgold—Formerly Hastings, organized in 1848 from Porter Township. Named for Major Samuel Ringgold, of Maryland, who died at Palo Alto during the Mexican War. Good agricultural region. Boroughs of Worthville and Timblin and villages of Ringgold and Dora. Population of township, 1,189.

Rose—Organized from Pinecreek 1827, included Brookville until 1848. Named for Dr. Rose, prominent citizen and landowner.

Farming is main industry. Borough of Brookville, county seat, and villages of Alaska, Coder, Stanton, McGarey, Bellview, Payne, Verstines Mills, and Rose. Population of township, 1,599.

Snyder—Named for Governor Simon Snyder and erected from Pinecreek Township in 1835. Brockway family settled here in 1822. Coal mining is chief industry. Borough of Brockwayville and villages of Crenshaw, Beechton, Sugar Hill, Lanes Mills, Blue Rock, Delwood, Corner, West Clarion Mines. Population of township, 1,654.

Union—Established from Rose and Eldred townships in 1848. John Scott settled here in 1802. Coal and limestone. Borough of Corsica and village of Roseville. Population of township, 579.

Warsaw—The largest township in the county, organized from Pinecreek Township in 1843 and named for that city in Poland. Vasbinder brothers settled here in 1800. Coal, iron ore, limestone and fire clay. Villages of Warsaw, Hazen, Egypt, Reitz, Allen Mills, Richardsville, Pekin, North Sulger, Pueblo, Moore Bridge, Markle, and Petersburg. Population of township, 992.

Washington—Named for President George Washington, established from Pinecreek and Snyder townships in 1836; settled in 1824. Underlying excellent veins of coal. Borough of Falls Creek and villages of Beech Tree, Coal Glen, Rockdale Mills, Westville, Harveys Run, Red Mill, Smittown, Pardus, Hormtown, and Grove Summit. Population of township, 1,857.

Winslow—Second most densely populated in the county, erected from Washington, Pinecreek, and Gaskill townships in 1847 and named for James Winslow, presiding judge. Coal mining and tanneries are major industries. Boroughs of Reynoldsville and Sykesville and villages of Bowersville, Pancoast, Pardus, Rathmel, Prescottville, Sandy Valley, Sherwood, Soldier, Deemers Cross Road, O'Donnell, Wishaw, Meredith, Paradise, Hopkins, and Prindible. Population of township, 2,549.

Young—Erected from Perry Township in 1826 and named for Judge John Young. Pioneer settler was Abraham Weaver prior to 1818. Underlaid with coal. Borough of Punxsutawney and villages of Walston, Harmony, Horatio, Adrian, DeLancey, Crawfordtown, Sportsburg, and Anita. Population of township, 2,298.

COUNTY OFFICIALS

Sheriff, Dale Grant; prothonotary and clerk of courts, David L. Holt; register and recorder and clerk of Orphans' Court, Walter

Evans; district attorney, William A. Sykes; solicitor, George H. Kurtz; solicitor, Lavelle A. Wilson; jury commissioner, Arthur Schreckengost; jury commissioner, W. H. Cramer; coroner, Gilbert Hulme; sealer of weights and measures, Frank Crozier.

McKEAN COUNTY

Area, 997 square miles. Population, 56,673.

Total taxable valuation for county purposes, \$66,129,947. Total local taxes collected, \$1,927,288 (1939).

Agriculture—Number of farms, 1,234; acres under cultivation, 33,281; value of lands and buildings, \$4,542,126; value of crops, \$605,530.

Manufacturing—Number of establishments, 106; capitalization, \$19,334,500; value of products, \$28,258,900; total number employed, 5,171; total compensation, \$6,393,500.

McKean County is known as "The Governor's County," in affectionate respect for General Thomas McKean, thrice Governor of Pennsylvania, President of Congress, Chief Justice of Pennsylvania, President of Delaware, and Signer of the Declaration of Independence. By an Act of the Legislature, March 26, 1804, it was established from Lycoming County. For judicial and civil purposes it was attached to Centre County until 1814; then with Lycoming County until 1826, when it was fully organized with Smethport as the shire town. Heretofore court business had been conducted in Bellefonte, Centre County. The early history of the section, presented amply in another chapter, is too extensive to be included in a directory. To the world at large McKean County is celebrated as the leader over a long period in the production of crude oil and natural gas in the Commonwealth; the Bradford Pool and the recent Music Mountain oil pools, being world renowned, and the power behind the considerable manufacturing done in McKean replacing former lumber industries.

CITY

Bradford—Often called "Oilderado" or "capital of oildom," is reputed to have been settled in 1823-27, although opened to pioneers in 1795. According to Godcharles:

"Colonel Levitt C. Little, agent of the United States Land Company, bought 160,000 acres of land in that vicinity in 1836, and erected the first log house on the present site of Bradford in 1837. The following year a plan for a town was drawn up, and the place called Littleton. In 1850 the Littleton tract of 50,000 acres was sold to Daniel Kingsbury, who

named the place Bradford, probably for his ancestral town of Bradford in England. Incorporated as a borough February 26, 1873, and chartered a city in February, 1870. First producing oil well in the city was drilled in 1875 by Jackson,



The Emery Hotel, Bradford

Walker, and Urquhart, east of the Dresser residence. The first oil exchange was established in 1877 as the Tuna Valley Oil Exchange. Home of the late Lewis Emery, Jr., pioneer oil producer, manufacturer of oxalic acid, and political leader."

Part of Foster Township was annexed to Bradford city in 1939. Population, 17,691.

BOROUGHs

Kane—The largest borough, was named in honor of Thomas Leiper Kane, of Philadelphia, the most distinguished citizen of the county, who, with David Cornelius, led an exploring expedition into the region in 1859. He bought an extensive tract where the town now stands, and built a house there in 1860. Kane led the famous "Bucktails" from this vicinity through the War of the Rebellion, fighting in thirty-five battles. General Kane returned to his new town and encouraged its development. Here he was visited by President Ulysses S. Grant, who was shown the points of interest in the county. The altitude of nearly 2,300 feet above sea level makes it a region of scenic beauty, unsurpassed in that region known as the Pennsylvania Highlands. Kane was established in Wetmore Township, February 15, 1887. Seat of a variety of industries. Population, 6,133.

Smethport—The county seat in 1826 had a pioneer settler in 1812, but the first permanent settlement was made in 1822. It was named in honor of Theodore de Smeth, member of a Dutch banking firm, who invested funds in the Ceres Land Company, through John Keating, who chose the name when the town was laid out in Keating Township in 1807. Incorporated a borough February 11, 1853. The chief industries are window glass, chemicals, toys, novelty factories, gas and oil wells, silica mines, stone and shale quarries, and agriculture. Population, 1,840.

Eldred—New name of an old settlement, formerly called Allegheny Bridge. Incorporated as Eldred, December 22, 1880. Oil refineries, handle works, last block factory, oil and gas wells, clay and shale pits produce the chief industries. Population, 1,051.

Lewis Run—Created a borough out of part of Bradford Township, March 4, 1911, named for the stream within its borders. Chief industries are oil refinery, chemical works and brickyards. Population, 844.

Mount Jewett—Erected as a borough out of Hamlin Township, June 6, 1893, and named for a prominent railroad official. One of the highest towns in the State. Window glass, shoes, toys, sleds, tannery, iron and brass foundry, bottling works, fire clay pits, and agriculture are principal industries. Population, 1,445.

Port Allegany—Was created as a borough out of Liberty Township, April 4, 1882. Settled in 1813. First known as Canoe Place,

the "Gateway to the Sinnemahoning and to the upper and lower Allegheny." Chief industries, glass works, tannery, chemical plants, trout hatchery, silk mill, timber, gas wells, and agriculture. Population, 2,356.

TOWNSHIPS

Annin—Formerly called "Turtle Point" when settled in 1836. Organized in 1857. Villages of Annin Creek, Turtle Point, Sartwell, Bell's Run, and Newell Creek. Population of township, 631.

Bradford—Settled by granting of warrant July 17, 1793, to William Bingham, and named Bradford when organized as a township in 1828. The city of Bradford and villages of Custer City, Howard Junction, Degola, Howard, Hazleton Mills, Sugar Run Junction, Wilson, Gilbert, Smith. McKean County Home for Children is in township. Population of township, 3,453, a substantial increase during past decade.

Ceres—Organized before McKean was erected in 1798, and named for the Ceres Land Company. Villages of Ceres, Myrtle, Glenn, Bell Run, Garner, and Phalin. Population of township, 737.

Corydon—In northwest corner of county; organized in 1829. Villages of Stickney, Williams Mills, Ostrander, Coffee Run, and Weedsport. Population of township, 159.

Eldred—Named in honor of Hon. N. B. Eldred, of Warren, then president judge. Organized in 1843. Borough of Eldred and villages of Larabee, State Line Mills, Indian Creek, Coryville, Sarwell, Haymaker, Bullis Mills, and Duke Centre. Population of township, 1,494.

Foster—Established in 1880 from Bradford Township; named in honor of first settler, Leonard S. Foster. Part of city of Bradford and villages of Foster Brook, Derrick City, Summit City, Dallas City, Rew, Sawyer City, Tuna Creek, Babcock, Hazelwood, Kincaid, McCalmont, Red Rock, Kendall Creek, Gilmore, Allen, and Corwin's Corner. Population of township, 4,676.

Hamilton—Settled in 1810; organized in 1834. Tanneries and carbon black are chief industries. Villages of Morrison, Ludlow, Wetmore, Wildcat, Justin, Whiting, Springer, Arbel, Root Run Station, Newton, Neilly, Watsonville, White Gravel, Dunkel Corners. Population of township, 1,378.

Hamlin—Erected in 1844. Famous Kinzua Viaduct, spanning the Kinzua Hills, 2,200 feet above sea level, and said to be the highest in the world, is near Mount Jewett, in this township. Borough of

Mount Jewett and villages of Kushequa, Gaffney, Kruzira, Viaduct Station, Fraleys, Kasson, Marvindale, Palmerville, Hazelhurst, Freeman, Griffith, Lapice Corners, Lafayette, Guffey, Kanesholm, Granere, Lantz, Shadeland, Boyer, and Glassboro. Population of township, 1,305.

Keating—Settled in 1807 by John Keating and named for him when erected in 1824. Is rich in oil and gas. Borough of Smethport, the county seat, and villages of Coryville, Coleville, Farmers Valley, Southard, Aiken, Gifford, Cyclone, Ormsby, Backus, East Smethport, Newton, McKeans, Simpson Corners, Wrights Corners, Bordell, Davis, Prospect Hill, Frisbee, Ormsby Station, and Kushequa. Population of township, 3,180.

Lafayette—Occupies almost the west half of the center of the township; erected in 1842. Has rich veins of coal and prolific oil-bearing sand. Borough of Lewis Run, villages of Lafayette, Taintor, Mount Alton, Bingham, Big Shanty, Marshburg, Glen Charles, West Line, Olivedale, Tally Ho, Ritterville, Crawford, Timbuck, Gates, Farleyville, Emery Station, Dent, Buttsville, and Bryanhope. Population of township, 914.

Liberty—Established in 1828. Borough of Port Allegheny and villages of Wrights, Portage Creek, Liberty, Wildwood, Coleman, Grimes, and Dunbar Mill. Population of township, 1,448.

Norwich—In conjunction with a strip of Liberty Township forms the southeast corner of the township. Organized in 1835; first permanently settled in 1815. Villages of Colegrove, Norwich, Gardeau, Newerf, Crosby, Betula, Sykes, and Hamlin. Population of township, 889.

Otto—Established from Eldred Township in 1854. Villages of Duke Center, Goodell, Prentice Vale, Rixford. Population of township, 2,542.

Sergeant—Organized in 1804; erected in 1854. Has rich deposits of coal and oil, and immense deposit of lime rock. Villages of Clermont, Hutchins, Burning Well, Freeman, Quinton, Smith Run, Chatham, Wernwag, Woodvale, and Halsey. Population of township, 467.

Wetmore—Created in 1856. Borough of Kane and villages of North Kane, East Kane, Burrows, Sergeant, Crystal Springs, Preston, Jo Jo Junction, Kendall Creek, Greendale, and Jerry Station. Population of township, 2,040.

MERCER COUNTY

Area, 681 square miles. Population, 101,039.

Total taxable valuation for county purposes, \$77,729,315. Total local taxes collected, \$2,585,697 (1939).

Agriculture—Number of farms, 3,764; acres under cultivation, 146,423; value of lands and buildings, \$14,952,329; value of crops, \$2,873,590.

Manufacturing—Number of establishments, 129; capitalization, \$55,527,100; value of products \$104,143,700; total number employed, 14,755; total compensation, \$24,010,800.

Mercer County, second largest in northwestern Pennsylvania, with more than a hundred thousand population, owes its increase in wealth and population to the iron and steel industry which has had a phenomenal development in the Shenango Valley. This county, bordering on the Ohio line for thirty-two miles, was separated from the original Allegheny County in 1800, later losing some of its territory when Lawrence County was formed on the south. The name was given to compliment General Hugh Mercer, a companion of George Washington, who died in 1777 from wounds received at the battle of Princeton. The shire town of Mercer is centrally located and was laid out in 1803, one year before the county became fully organized. The advantages of this part of the State were known long before permanent settlements were made, but difficulty in obtaining proper land titles continued to discourage settlers until 1805. After that a fine class of settlers speedily attracted many others to what has become one of the best counties of the State.

Mercer is one of the two counties whose population has increased every decade since the Census of 1800, a remarkable record. More than three-quarters of its 681 square miles are devoted to successful agriculture, although this industry runs second to manufacturing.

CITIES

Sharon—Was first settled in 1802, by Benjamin Bentley, and went on to become the largest municipality in the county and one of the important industrial settlements of the Commonwealth. Incorporated as a borough, October 6, 1841, it received a city charter on December 17, 1915. Sharon, of the Biblical name, was laid out by William Budd in 1815 and, in 1819, received its present title. Population, 25,622.

Farrell—Incorporated as a borough from Hickory Township in 1901, as South Sharon, is second only to the mother city in size and

importance. In 1911 its name was changed to honor James A. Farrell, president of the United States Steel Corporation, who had played an outstanding rôle in the development of steel works in the borough. On January 4, 1932, Farrell received a city charter. Population, 13,899.

BOROUGHES

Clarksville—Established from South Pymatuning Township, May 5, 1848. Named for Samuel Clark and laid out by him in 1829. Owing to decadence of canal and distance of railroad station, prosperity of the town has steadily declined. General James Pierce was among the early prominent citizens who helped develop the coal industry. Population, 321.

Fredonia—Incorporated from Delaware Township, August, 1876. Founded by William Simmons. Levi Arnold, owner of the original site, and builder of first mill. Seat of Fredonia Institute. File works. Population, 536.

Greenville—The third largest municipality and the oldest town in the county, incorporated from West Salem and Hempfield townships, May 29, 1837. Parts of Hempfield Township have been annexed since 1939, at various dates. Laid out in 1819 by Thomas Bean and William Scott; long called West Greenville, for General Nathanael Greene, of the Revolution. Name changed to Greenville in 1865. Jacob Loutzenhizer was one of the earliest settlers in 1798. Seat of Thiel College, established in 1871. Chief products are steel cars, bridges, tanks, foundry products, railroad shops, and agricultural products, chiefly dairying and live stock. Population, 8,149.

Grove City—Formerly called Pine Grove, but changed to Grove City, when incorporated from Pine Township, January 4, 1883. Seat of Grove City College. Parts of Pine Township have been annexed at various dates since 1930. Gas engines, bus and truck bodies, creamery products, brooms, brass, bronze and aluminum castings, radio cabinets, outdoor and special furniture, tools and building supplies, flour, coal, oil, and agricultural crops are chief resources. Radio Station WSAJ. Population, 6,296.

Jackson Center—Incorporated from Jackson Township, June 5, 1882. Coal mining. Population, 268.

Jamestown—Named for James Campbell, its pioneer settler, in 1798. Agricultural region, incorporated from Greene Township in 1854. Population, 819.

Mercer—Town incorporated March 28, 1814. A newspaper was published in 1811. Lafayette was a guest here in 1824. Population, 2,272.

New Lebanon—Established from Mill Creek Township, August 22, 1866. Rynheer Van Voorhies came here in 1803. Population, 154.

Sandy Lake—Taken from Sandy Lake Township, August 20, 1859. First settled by Alexander Brown in 1800, and laid out by his son, Thomas J. Brown, and called Brownsville until incorporated. Both father and son were associate judges. Chief products, coal, flour, creamery products, bottling works. Population, 718.

Sharpsville—Incorporated June 9, 1874, from Hickory Township and named for James Sharp, original owner of land. Jonathan Dunham settled in 1798. Sharpsville furnace built in 1846; Sharpsville Furnace first name of post office. Part of Hickory Township annexed in 1925. Iron and steel, chief products. Population, 5,129.

Sheakleyville—Named for George Sheakley, founder in 1820, originally called Georgetown by him. Incorporated from Sandy Creek Township, March 11, 1851. Pioneer settler was William Byers, who built the first house here in 1798, and also set up a saw-mill. Creamery products. Population, 136.

Stoneboro—Established August 25, 1866, from Lake Township. Settled by Negro freemen and first called Liberia. Coal and magnesite mines and natural ice. Population, 1,194.

West Middlesex—Taken from Shenango Township in 1864. Laid out by James Gilkey in 1836. One of the centers of the iron and steel industries in the Shenango Valley. Population, 1,126.

Wheatland—Incorporated from Hickory Township, February 21, 1872. Prior to 1797 the Shillings were located here. Laid out in 1865 by James Wood, of Pittsburgh, who named the place for the estate of President James Buchanan, near Lancaster. Iron and steel products, automobile parts, boxes. Population, 1,421.

TOWNSHIPS

Coolspring—Organized in 1805 as an original township and named for its famous never-failing spring. Oil wells abound. Benjamin Stokeley was first settler in 1795. Population, 1,166.

Deer Creek—Erected from Sandy Creek Township, April 7, 1851. Settled by Aaron Boylan and David Caldwell as early as 1800. Only village Sunol. Population of township, 387.

Delaware—Created in 1805 from Pymatuning Township. Settled prior to 1800. Borough of Fredonia, villages of New Hamburg and Kremis. Population of township, 1,252.

East Lackawannock—Erected from Lackawannock Township in August, 1849. Alexander McCullough was pioneer settler prior to 1800. Agricultural. Part of borough of Mercer. Population of township, 659.

Fairview—Taken from Coolspring Township, September 21, 1850. Part of borough of Fredonia and villages of Hartheig and Fairview, Half Moon Swamp, once a morass. Population of township, 644.

Findley—Created in August, 1849, from Springfield Township and named for John Findley, its original settler, in 1796. Borough of Mercer, county seat, and village of Pardoe. Population of township, 1,062.

French Creek—Named for the celebrated stream; established from Sandy Creek Township in 1805. Scene of Indian and French occupation. Villages of Milledgeville and Carlton. Population of township, 567.

Greene—Formed in 1844 from West Salem Township and named for General Nathanael Greene, of Revolutionary War fame. The three brothers Sherbondy—Philip, John, and Jacob—settled here prior to 1799. First settlers were the Morelands, in 1796. Borough of Jamestown. Population of township, 640.

Hempfield—Erected from Salem and West Salem townships in May, 1856, and part of this township annexed to Greenville Borough in 1939. Settled by Klingensmith brothers in 1796. Borough of Greenville. Population of township, 1,840.

Hickory—Created in 1833 from Shenango and Pymatuning townships. Coal and iron operations are chief industries. Cities of Sharon and Farrell, boroughs of Sharpsville and Wheatland, and villages of Hermitage and Neshannock. Population of township, 4,295.

Jackson—Named in honor of President Jackson, settled in 1796. Taken from Coolspring Township on September 21, 1850. Borough of Jackson Center. Population of township, 688.

Jefferson—Erected from Pymatuning Township in April, 1850, and named for President Thomas Jefferson. Settled in 1798. Villages of Big Bend and Charleston. Population of township, 937.

Lackawannock—Settled as early as 1798 and named for small lake. Taken from Neshannock Township in 1805. Village of Greenfield. Population of township, 1,068.

Lake—Named for Sandy Lake, the greater part of which is within township limits. Taken from Coolspring Township, September 21, 1850. First settler was Matthias Zahniser, in 1796. Coal mines. Borough of Stoneboro. Population of township, 518.

Liberty—Settled by William Gill in 1797. Erected from Wolf Creek Township, February 17, 1851. Villages of North Liberty and Amsterdam. Population of township, 588.

Mill Creek—Established from French Creek Township in November, 1849. Pioneer settler, in 1796, was Jacob Reed. Borough of New Lebanon and village of North Sandy. Population of township, 518.

New Vernon—Long known as community of "Ten Milers," who came from Ten Mile Creek, Westmoreland County, in 1798. They were Scotch-Irish Presbyterians, whose names still exist in this region. Erected from Sandy Creek Township, April 7, 1851. Only village is New Vernon. Population of township, 454.

Otter Creek—Erected from Salem Township, April 21, 1858. James Williamson settled here in 1800. Iron ore is found here. Population of township, 407.

Perry—Established from Sandy Creek Township, April 7, 1851, as Mineral Township, from the abundance of rich deposits of iron and coal. Name changed to Perry for naval hero. Martin Carriger came here in 1796. Villages of Hadley and Clarks Mills. Population of township, 1,007.

Pine—Named for rich pine forests; created from Wolf Township in February, 1851, and parts of this township annexed to Grove City Borough at various dates since 1930. John Perry was an early settler in 1796. Borough Grove City and village of Enterprise. Population of township, 1,705.

Pymatuning—Created from Salem Township in 1802. The Indian word meaning "the home of the man with the crooked nose." Settled by Godfrey Carnes, in 1801. Jacob Loutzenhizer built a mill here in 1798. Village of Transfer. Population of township, 875.

Salem—One of the four original divisions of the county in 1801; settled in 1796. Population of township, 456.

Sandy Creek—Settled in 1796. Taken from Sandy Lake Township in 1802. Agricultural. Borough of Sheakleyville. Population of township, 455.

Sandy Lake—Formed in 1805 from Coolspring Township. First settler, Patrick McCloskey, in 1797. The eastern end of the lake is within the township and partially embraced in borough limits of Sandy Lake. Borough of Sandy Lake. Population of township, 820.

Shenango—In 1805 taken from Neshannock Township. Settled by Samuel Byers and Andrew Wylie, of Virginia, in 1796. Borough of West Middlesex. Population of township, 1,682.

South Pymatuning—Formed on December 2, 1914, from Pymatuning Township. Borough of Clarksville. Population of township, 1,717.

Springfield—Established from Wolf Creek Township in 1805. First settler, Robert Ginter, in 1797. Agriculture. Villages of London and Blacktown (or Balm). Population of township, 1,788.

Sugar Grove—Erected in November, 1856, from Greene and Salem townships. Named for Maple Grove. Settled in 1798 by Roberts Colony. Villages of Kennard, Leech's Corners, and Osgood. Population of township, 627.

West Salem—Settled by Peter Klingensmith in 1796. Taken from Salem Township in 1805. Dairying. Villages of Shenango, Maysville and part of borough of Greenville. Population of township, 2,460.

Wilmington—Established in 1846 from Lackawannock and Neshannock townships. Settled by Young and Cozad families in 1798. Village of Indian Run. Population of township, 414.

Wolf Creek—An original township, formed in 1802 from part of Mercer Township. The Wolf Creek Rangers were justly celebrated in War of 1812. Only village is Centertown, settled by Samuel Waldron, in 1799. Population of township, 487.

Worth—Formed from Wolf Creek Township, November 10, 1849, and named for Major-General William Jenkins Worth, hero of the War with Mexico. The five Henderson brothers were pioneer settlers in 1795. Villages of Henderson and Millbrook. Population of township, 794.

COUNTY OFFICIALS

Sheriff, Alex Elliott; prothonotary, Harry W. Kremis; register and clerk of Quarter Sessions and Orphans' Court, F. L. Hutchison;

recorder, Stephen Lukacs; district attorney, Edwin C. Moon; solicitor, Nathan Routman; jury commissioner, L. E. Lyle; jury commissioner, W. A. Bone; coroner, James A. Biggins, M. D.; sealer of weights and measures, Harry Hunter.

VENANGO COUNTY

Area, 675 square miles. Population, 63,958.

Total taxable valuation for county purposes, \$95,962,-693. Total local taxes collected, \$1,468,641 (1939).

Agriculture—Number of farms, 2,294; acres under cultivation, 79,118; value of lands and buildings, \$6,756,321.

Manufacturing—Number of establishments, 82; capitalization, \$18,523,800; value of products, \$41,067,900; total number employed, 5,252; total compensation, \$7,515,400.

Venango is one of the few counties that has increased in population according to every census, except two, from 1800, when it was credited with 1,130 souls. It was set up as a county on March 12, 1800, from western Lycoming and eastern Allegheny counties, and derived its name from the Venango River (French Creek). The name French Creek was given that stream by George Washington when he saw it in 1753, because the French had a fort at the mouth. The aborigines knew this waterway as "In-nan-ga-eh," or something that sounded like these syllables, but whether it was the Indian for "bull thistles" the compiler does not know. The French were the first Europeans to locate permanently, and they established Jesuit missions and trading posts along the streams. Céleron planted leaden plates along the Allegheny in 1749, claiming possession in the name of the French King. Six miles down the river from Franklin is "Indian God Rock," on which are Indian pictographs, and near this rock Céleron planted one of the leaden plates. Young George Washington passed through this country and paused at Fort Machault on his mission to Fort LeBoeuf in December, 1753. Then came the English, followed by the destruction of Fort Venango and the massacre of its garrison in the Pontiac War, in 1763. The well of this fort is under a brick house in Franklin. Finally the Americans erected Fort Franklin in 1787 and the sovereignty changed to the fourth power—Indian-French-English-American. The Indian title to this region was extinguished by the purchase of October 23, 1784. For the story of the county and its chief cities and boroughs as identified with petroleum, see the chapter on "Industries" in this volume.

CITIES

Oil City—Settled in 1796. Laid out as a town in 1859-60. Incorporated as a borough January 10, 1862. Annexed Venango City April 11, 1871. Chartered as a city March 11, 1871. Annexed Siverly and West End boroughs since 1910. It has been called the oil center of the Eastern United States and its history has been tied up with petroleum since the hectic discovery days of 1859. Population, 20,379.



(Holmes Crosby, Architect)

Senior High School, Oil City

Franklin—County seat, naturally well situated at the juncture of French Creek with the Allegheny River; from the first was a place of destiny. On March 24, 1789, the General Assembly directed that this site be surveyed for the use of the Commonwealth, and the town of Franklin was laid out by William Irvine and Andrew Elliott, April 18, 1795. In 1805 the judicial records of the county were removed from Crawford County to Franklin. Incorporated as a borough April 14, 1828, and chartered as a city April 4, 1868. The city is now operated under a commission form of government. The original settler was George Power, in 1787. Population, 9,948.

BOROUGHs

Clintonville—Incorporated from Clinton Township, January 28, 1878. Oil, gas and coal products. Population, 329.

Cooperstown—Named for William Cooper, veteran of the Revolution and owner of a tract in this donation district, settled here with his family in 1797. Taken from Jackson Township, November 25, 1858. Woolen mills, iron products, flour and feed stuff, and oil wells. Population, 205.

Emlenton—Established from Richland Township, January 27, 1859, and named for Hannah Emlen, the maiden name of the wife of Joseph M. Fox, who owned the site. Chief industries: coal mines, oil wells and refineries, tank works, lumber, and flour mills. Population, 986.

Pleasantville—Erected from Oil Creek Township, March 22, 1850. Settled by Abraham Lovell in 1820. Iron products, oil well machinery, wagons, and flour mills. Population, 689.

Polk—Established August 23, 1886, from French Creek Township. Originally called Waterloo. Seat of Polk State School for Feeble-minded Children. Population, 3,690.

Rouseville—Named for H. R. Rouse, the first victim of an oil explosion, April 17, 1861. Taken from Cornplanter Township in 1900. Intense excitement here during early days of the oil industry. Population, 998.

Utica—Created from French Creek Township in November, 1863, and named by its founder, A. W. Raymond, for his native city of Utica, New York, in 1830. Woolen mills were established here at an early date. Population, 216.

TOWNSHIPS

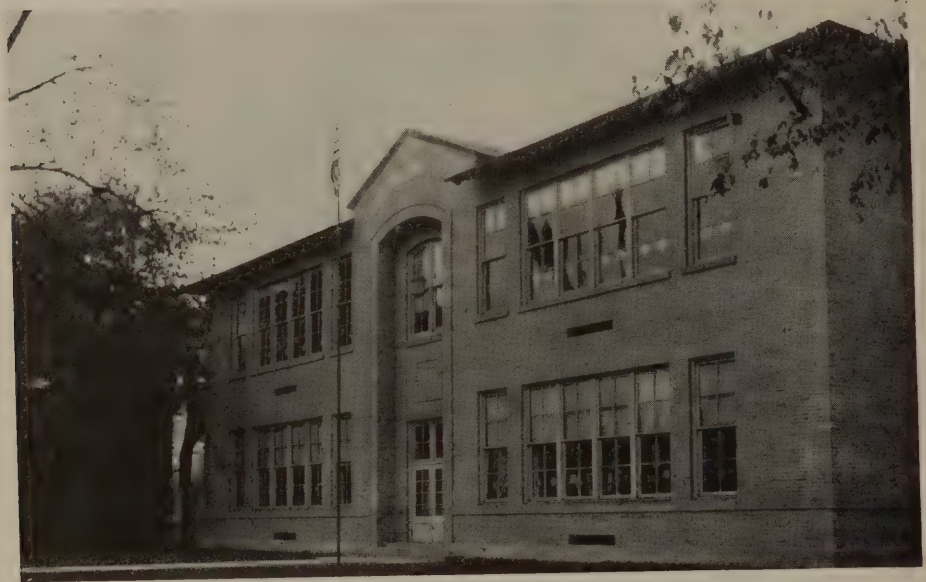
Allegheny—An original township, created October 6, 1800, when the seat of justice was in Crawford County. Named for the river which forms its eastern boundary. Villages of Cashup, Carsonville. Population of township, 245.

Canal—Named for the old French Creek Canal, which ran along its southern border. Erected from Sugar Creek Township, November 28, 1833. Agricultural district, settled early as 1797. Hannaville only village. Population of township, 757.

Cherry Tree—An original township, but united with Plum Township until 1817. Named for its stream. William Reynolds, in 1797, was pioneer settler. Villages of Cherry Tree, Breedtown, Alcorn-town, Miller Farm, and Boughton. Population of township, 1,253.

Clinton—Erected from Scrubgrass and Irwin townships, April, 1855. Borough of Clintonville and villages of Kennerdell and Boulion, center of rich oil district. Jamestown, Summit City, Berringer City, and Dean City have altogether disappeared. Population of township, 759.

Cornplanter—Established from a reservation by order of court, November 28, 1833, and named for the Seneca chief. Part of Tionesta Township was annexed in August, 1837. Oil City is situated within the limits of this township, also the borough of Rouseville.



(Holmes Crosby, Architect)

Third Ward School, Franklin

Seat of the famous Pithole City, which grew from a farm in January, 1865, to a borough of sixteen thousand folk when incorporated, November 13, 1865; and with the failure of the oil wells it dwindled to a hamlet of six persons in November, 1876. Other villages are Plumer, Walnut Bend, Petroleum Center, Kaneville, McClintockville, Rockwood, and Siverly, once a borough. Population of township, 2,179.

Cranberry—Taken from French Creek Township in April, 1830. Coal and oil are found. Villages of Salina, Salem City, Hill City, Ten-Mile Bottom, Bredinsburg, Cranberry, Reed, Van, Maple Shade, East Sandy, Seneca, and Cochran Station. Population of township, 4,602.

French Creek—Named for the historic stream and established in 1806. Boroughs of Utica, Polk and villages of Racy and Miles Station. Population of township, 1,065.

Irwin—An original township, established October 6, 1880, when part of Crawford County. Named for General William Irwin. Villages of Mechanicsville, Barkeyville, Nectarine, and Wesley. Population of township, 1,312.

Jackson—Formed in 1845 out of Plum, Oakland, Canal, and Sugar Creek townships. Named for President Andrew Jackson. Borough of Cooperstown and villages of Mason and Wilsons Mills. Population of township, 638.

Mineral—Established from Sandy Creek and French Creek townships, October 24, 1870. Only village is Raymilton, named for its founder, A. W. Raymond, who owned a mill here. Some oil in the township. Population of township, 384.

Oakland—Organized in 1841 from Cornplanter, Plum, and Sugar Creek townships. Only village, Dempeytown. Population of township, 980.

Oil Creek—Taken from Cornplanter and Allegheny townships, August 30, 1866, and named for its stream. Borough of Pleasantville and villages of Shamburg, East Shamburg, and Pioneer Station. Population of township, 559.

Pine Grove—Erected from Farmington and Toby's Creek townships in February, 1824. Grant of 3,000 acres to Dickinson College is in this township. Villages of Centerville, Coal Hill, Venus, Lineville, Unionville, Gas City, and Fertigs. Population of township, 1,244.

Plum—Established from Sugar Creek Township in 1817. Erected on organization of the county, but attached to Cherry Tree until 1817. Villages of Sunville, once a borough, and Chapmanville, Wallaceville, Diamond, Bradleytown, and Plum. Population of township, 776.

President—Taken from Pinegrove, Cornplanter, and Tionesta (present Forest County), April 3, 1850. A clever Irishman, Patrick McCrea, was first settler. Resources, iron and oil. Villages of President, Eagle Rock, Oleopolis, Henry Bend Station, and Baum. Population of township, 270.

Richland—An original township; reduced to help form Clarion County in 1839. Borough of Emlenton and villages of Nickleville,

Moriasville, Kelfers, Porterfield, and Dotler Station. Population of township, 811.

Rockland—First called Rock Township; an original township. Probably called Rockland in 1817. Iron, oil and coal. Villages of Rockland, Freedom, Scrubgrass, Davis' Corners, Miller's Corner, Georgeville, Coal City, Pittsville, Floyd, Kennerdell, Foster, Roberts Run, and Brandon. Population of township, 1,151.



Public School, Emlenton

(Holmes Crosby, Architect)

Sandy Creek—Erected from French Creek Township in March, 1806, but first organized as township November 29, 1834. Named for Big Sandy Creek. City of Franklin and village of Mays Mills. Population of township, 1,129.

Scrubgrass—Settled as early as any part of the county; an original township. Coal and oil. Villages of Lisbon, Crawford's Corners, Eakin Corners, Cyrus, Hoodville, and Big Bend. Population of township, 716.

Sugar Creek—An original township, erected October 6, 1800, when part of Crawford County. One of the three townships estab-

lished by Crawford County Court. Villages of Sugar Creek, Reno, Galloway, Rocky Grove, Wyattville, Fee, and Eclipse. Population of township, 5,426.

Victory—Established from Sandy Creek Township, September 6, 1876, and as the centennial year, the name was suggested for the township. Iron furnaces were established about 1835. Part of borough of Polk and villages of Springville or Balliett, and Pearl. Population of township, 262.

COUNTY OFFICIALS

Sheriff, James C. Marshall; prothonotary and clerk of Court of Quarter Sessions, Roy P. Nelson; register and recorder and clerk of Orphans' Court, Richard I. Fry; district attorney, Daniel J. Skelly; solicitor, F. Harold Gates; jury commissioner, Mrs. W. J. James; jury commissioner, James Ahearn; coroner, Paul E. Cunningham; sealer of weights and measures, R. A. Pringle.

WARREN COUNTY

Area, 910 square miles. Population, 42,789.

Total taxable valuation for county purposes, \$41,042, 379. Total local taxes collected \$922,135 (1939).

Agriculture—Number of farms, 2,028; acres under cultivation, 57,608; value of lands and buildings, \$6,071,363; value of crops, \$1,001,850.

Manufacturing—Number of establishments, 87; capitalization, \$14,588,200; value of products, \$24,409,500; total number employed, 4,076; total compensation, \$5,835,200.

Warren, one of the original counties of Pennsylvania, is noted for its natural beauty. It is recorded that Céleron de Bienville, on his expedition to confirm possession of this region for France, came through this section in 1749, following the Conewango River to the Allegheny, past the present borough of Warren and thence southwest to the Ohio River. The county was organized in 1800, parts of its territory being taken from both Lycoming and Allegheny counties. The name was bestowed in honor of the valiant General Joseph Warren, of Bunker Hill fame. The same name was applied to the county seat, a pleasant town on the Allegheny River, which, however, did not become the seat of justice until 1819. Up to that time Warren and Venango counties were combined for judicial purposes.

Cornplanter Reservation, located in Warren County, is the only Indian reservation in Pennsylvania.

CITY

Warren—The county seat, includes parts of Conewango and Glade townships. Plans for settlement of its site were made and carried into effect on March 18, 1795, under a survey undertaken by General William Irvine and Andrew Ellicott. As already indicated, actual settlement of most northwestern Pennsylvania was greatly retarded by the War of 1812, and it was not until after the



Warren High School

end of this conflict that Warren began to make any real growth as a settlement. It was incorporated in 1832, made its most rapid progress during the later oil period (1880 to 1900), petroleum refineries being one of its important businesses, although manufacturing is of many types. Population, 14,891.

BOROUGHES

Bear Lake—Established from Freehold Township, September 6, 1887, and named from its lake. Population, 214.

Clarendon—Incorporated from Mead Township in 1882. Town laid out in 1872 and named for Thomas Clarendon, owner of tannery

and sawmill there. Rose with an oil boom and did not collapse as did so many of the towns which developed at this period in the county history. Crude oil, gas and leather are chief industries. Population, 824.

Grand Valley—Taken from Eldred Township in 1840. Lumber was original industry. Population, 268.

Sugar Grove—Incorporated from Sugar Grove Township, March 18, 1893. Agriculture chief industry. Population, 440.

Tidioute—Named for its creek, an Indian word, meaning "seeing far," or "straight water," and taken from Deerfield Township in 1862. Settled prior to 1800 and became a village of two sections, Upper and Lower Tidioute. Lumber was first industry, then oil became a major industry, and since then has developed as a manufacturing town, the chief products of which are oil and its products, cutlery, aluminum ware, clothes wringers, novelties, gas, and timber. Summer resort. Population, 955.

Youngsville—Established in 1849 from Brokenstraw Township and named for Matthew Young, schoolmaster, and its first settler in 1796. Principal products are oil, furniture, mirrors, shale products, and agriculture. Population, 1,909.

TOWNSHIPS

Brokenstraw—An original township, erected in 1800 by courts of Crawford County. Named for its historic creek, which is a translation of the Indian word meaning "flats which once bore a crop of stiff prairie grass." It embraced the entire county of Warren, and in 1821 its territory was divided into twelve parts, Brokenstraw being "Number Four." First industry was lumber, now an agricultural district. Borough of Youngsville and village of Irvine. Population of township, 1,124.

Cherry Grove—Established from Sheffield Township in 1847 and named for its trees. Portion of the great State game preserve is in northwest section. Villages of Garfield and Cherry Grove. Population of township, 82.

Columbus—Named for the discoverer of America, erected from Brokenstraw Township in 1821. It is also claimed to have been named by Kimball Webber for Columbus, New York, from which place he came to settle here. It was incorporated as a borough in 1853 and named for the township. Disincorporated and reverted to town-

ship in 1924, and is the principal village; other hamlets are Pine Valley, Calza, and Roach. Population of township, 1,244.

Conewango—Erected from Brokenstraw Township in 1832 and named for its stream. It is an Indian word, a variant of Conewago, "at the rapids." Borough of Warren, county seat, and villages of North Warren, seat of the State Hospital for Insane, and Irvine. Population of township, 4,988.

Corydon—Taken from McKean County in 1846. Villages of Corydon, Gowango, Cornplanter, Sugar Run Station, and Dewdrop. Population of township, 260.

Deerfield—Originally called "Number Eleven," erected from Brokenstraw Township in 1821. Oil wells. Borough of Tidioute and villages of Thompson, Cobham, Magee, and Parthenia. Population of township, 319.

Eldred—Erected from Somerset Township in 1843. Borough of Grand Valley and villages of Eldred, Sanford, Newton, and Eagle. Population of township, 492.

Elk—Taken from Brokenstraw Township in 1830 and named for the many elk in this region. Cornplanter Reservation is within its limits. Villages of Scandia and Germany. Population of township, 309.

Farmington—Formed from Pine Grove Township in 1853 and named for its fertility. Villages of Lander, formerly Farmington, and Putnamville. Population of township, 854.

Freehold—Erected from Columbus and Sugar Grove townships in 1833. Borough of Bear Lake and villages of Freehold, Lottsville, and Wrightsville. Bear Lake is within its limits. Population of townships, 997.

Glade—Adjoins corporate limits of Warren, county seat. Erected from Conewango Township, 1844. Lumber is the natural resource. Villages of Glade, Hemlock, Hazeltine Corners, and Big Bend. Population of township, 1,010.

Kinzua—Named for its stream, an Indian word meaning "fish on spear." Formed from Brokenstraw Township in 1821. The Kinzua Hills are nearly 2,200 feet above sea level. Village of Kinzua. Population of township, 541.

Limestone—Established from the provisional township called Tionesta, in 1829, and named for its soil. Village of Gillis. Population of township, 250.

Mead—Organized from Sheffield, Kinzua, and Pleasant townships in 1847 and named for David Mead. Oil refineries. Borough of Clarendon, villages of Tiona, Weldbank, Stoneham, Glade Station, and Watson Station. Population of township, 1,223.

Pine Grove—Formed from Brokenstraw Township in 1821 and named for its fine pine forests. Villages of Russell, Gouldtown, Cable Hollow, Akeley. Population of township, 1,415.

Pittsfield—Taken from Spring Creek and Brokenstraw townships in 1847. Villages of Pittsfield, Garland, Torpedo, Dugall, and Quarry Station. Population of township, 1,197.

Pleasant—Established from Brokenstraw Township in 1834 and named for pleasant situation. Near borough of Warren, county seat. Village of Grunderville. Population of township, 829.

Sheffield—Formed from Kinzua in 1833. Lumber was original interest, with many tanneries taking the bark. Sheffield is principal village, whose chief products are oil, glass products, cooperage stock, leather and furniture. Other villages are Saybrook, Roystone, Barnes, Hoover, Donaldson, Martin, Cherry Run Station. Population of township, 3,365.

Southwest—Erected from Deerfield Township in 1838 and named for its geographical position. Villages of Selkirk, Enterprise, Scofield, and Goodwill Hill. Population of township, 550.

Spring Creek—Named for its stream, and erected from Brokenstraw Township in 1821. Agriculture, with emphasis on stock raising, dairy products, and fruit growing. Villages of Spring Creek, West Spring Creek, Cobbs, East Branch, and Horne Station. Population of township, 702.

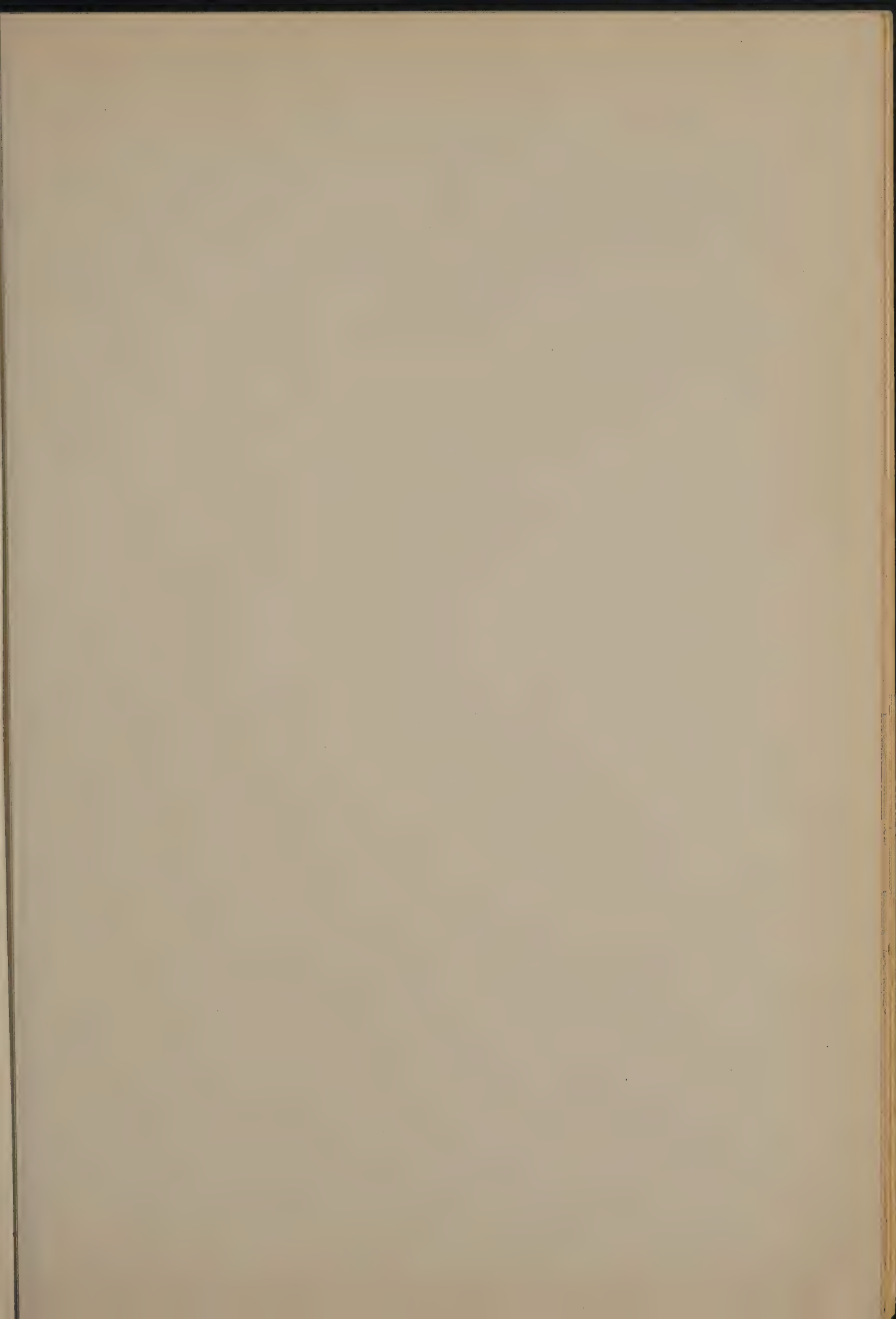
Sugar Grove—Established from Brokenstraw Township, in 1831, and named for the maple groves. Maple sugar and fruit growing are principal industry. Borough of Sugar Grove and villages of Chandlers Valley and Nuttal. Population of township, 966.

Triumph—Erected from Deerfield Township in 1878. For a time an oil section, but now devoted principally to agriculture. Villages of Triumph, McGraws, New London, Fagundas, and Funkville. Population of township, 384.

Watson—Taken from Limestone Township in 1880 and named for L. F. Watson, prominent lumberman. Lumber was chief interest. Large part of a great State game preserve is in the township. Population of township, 151.

COUNTY OFFICIALS

Sheriff, William C. Stuart; prothonotary and clerk of Court of Quarter Sessions, Addison White; register and recorder and clerk of Orphans' Court, O. E. Loper; district attorney, Joseph H. Goldstein; jury commissioner, John E. King; jury commissioner, L. E. Lindquist; coroner, Ed. C. Lowrey; sealer of weights and measures, W. Robert Walsh.



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